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**Maternal Behavior During Cross-Race Interactions and Children's Racial  
Attitudes: The Nonverbal Transmission of Prejudice**

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**Maternal Behavior During Cross-Race Interactions and Children's Racial  
Attitudes: The Nonverbal Transmission of Prejudice**

by

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**Maternal Behavior During Cross-Race Interactions and Children's Racial Attitudes: The Nonverbal Transmission of Prejudice**

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The current population of the United States is remarkably racially diverse relative to its past and to other nations. As a result, individuals have many opportunities to interact with others from differing racial backgrounds. However, close, intimate, friendships between individuals from differing racial groups remain uncommon, especially among European Americans. Given persistent racial tension within the U.S., it is important to understand how racial attitudes develop in children and how these attitudes influence interracial interactions. A common adage is that “hate is learned” and theorists have long argued that children adopt the racial attitudes of their family members (Allport, 1954). However, research provides inconsistent evidence for this claim. The primary goal of this dissertation is to examine the role of maternal race-related attitudes and behavior, especially mothers’ modeling of behavior during cross-race interactions, in shaping children’s racial attitudes.

Specifically, we sought to test the hypothesis that Asian American, European American, and Latino mothers who exhibit more warm interactions with an African

American confederate would be more likely to have children who have positive attitudes toward African American. Conversely, Asian American, European American, and Latino mothers who behave in an anxious or avoidant manner during an interaction with an African American confederate would be more likely to have children with negative attitudes toward African Americans. Additionally, we investigated the role of individual differences in predicting mothers' nonverbal behavior in the cross-race interactions (i.e., levels of situational diversity, social network, racial attitudes, theories of prejudice, colorblindness).

Mothers ( $N = 44$ ; 29 to 48 years,  $M = 39.54$ ) and their children ( $N = 44$ ; 21 girls, 4 to 6 years ;  $M = 5.31$  ) were placed in a room with an African American confederate. The interaction was unstructured (i.e., no task to be completed or predetermined topic to be discussed) and filmed in its entirety. Mothers and children were then separated post-interaction and completed several measures of racial attitudes. Results indicated mothers lived in moderately racially diverse environments. As expected, mothers' and children's attitudes toward African Americans were unrelated; mothers held slightly pro-African American attitudes, whereas children held slightly pro-European American attitudes. Mothers also discussed race with their children somewhat often as evidenced by their self-reported frequency of race-related messages and reported little apprehension about broaching the topic with their children. Contrary to expectations, none of the maternal measures assessed here (e.g., mothers' racial socialization, racial beliefs, intergroup contact, nonverbal behavior) were significant predictors of their children's racial attitudes.

## TABLE OF CONTENTS

List of Tables	xi
<b>CHAPTER ONE: INTRODUCTION</b>	<b>1</b>
Theoretical Perspectives on Children's Racial Attitudes Racial	2
Intergroup Contact Theory	3
Social Learning Theory	4
Parental Effects on Children's Racial Attitudes	5
Racial Socialization	6
The Present Study	7
<b>CHAPTER TWO: METHODS</b>	<b>10</b>
Participants	10
Procedure	11
Child's Measures	11
Sorting Task	11
Trait Ratings	12
Social Distance Ratings	13
Estimates of Mothers' Trait and Social Distance Ratings	13
Observer Ratings of Child's Nonverbal Behavior	13
Maternal Measures	14
Demographics	14
Self-Perceived Behavior	14
Observer Ratings of Mothers' Nonverbal Behavior	15

Trait Ratings	16
Social Distance Ratings	16
Estimates of Child's Trait and Social Distance Ratings	17
Racial Socialization	17
Interracial Contact	18
Child's Interracial Contact	18
Valuing of Diversity	19
Theories of Prejudice	19
Prejudice Concerns	20
Prejudice Concerns About Child	20
Colorblind Ideology	21
Fear of Discussing Race	21
<b>CHAPTER THREE: RESULTS</b>	22
Overview of Data Analysis Plan	22
Mothers' and Children's Racial Attitudes	22
Mothers' Trait Ratings	22
Children's Trait Ratings	22
Mothers' Social Distance Ratings	23
Children's Social Distance Ratings	23
Mothers' and Children's Estimates of the Others' Racial Attitudes	23
Mothers' Estimate of Children's Trait Ratings	23
Children's Estimate of Mothers' Trait Ratings	24

Mothers' Estimate of Children's Social Distance Ratings	24
Children's Estimate of Mothers' Social Distance Ratings	24
Mothers' Race-Related Behaviors and Beliefs	25
Overview	25
Current Socialization Behaviors	25
Mothers' Interracial Contact	25
Mothers' Racial Beliefs	26
Mothers' Self-Reported Behavior in Interaction	26
Observers' Ratings of Mothers' and Children's Behavior in Interaction	26
Test of Hypothesized Predictors of Children's Racial Attitudes	27
Overview	27
Does Mothers' Racial Socialization Predict Child's Racial Attitudes	27
Does Mothers' Intergroup Contact Predict Child's Racial Attitudes	27
Do Mothers' Racial Beliefs Predict Child's Racial Attitudes	28
Test of Hypothesized Predictors of Mothers' and Children's Observed Behavior	29
Overview	29
Does Mothers' Racial Socialization Predict Their Own Nonverbal Behavior	29
Does Mothers' Racial Socialization Predict Their Child's Nonverbal Behavior	29
Does Mothers' Intergroup Contact Predict Their Own Nonverbal Behavior	30
Does Mothers' Intergroup Contact Predict Their Child's Nonverbal Behavior	30
Do Mothers' Racial Beliefs Predict Their Own Nonverbal Behavior	30
Do Mothers' Racial Beliefs Predict Their Child's Nonverbal Behavior	31



Does Mothers' Racial Attitudes Predict Their Own Nonverbal Behavior	31
Does Children's Racial Attitudes Predict Their Own Nonverbal Behavior	31
Test of Predictors of Mothers' Experienced and Expressed Emotion During The Cross-Race Interaction	32
Mothers' Perceived Experienced Negative Behaviors	32
Mothers' Perceived Expression of Negative Behaviors	32
Does Mothers' Nonverbal Behavior Predict Their Child's Racial Attitudes	33
<b>CHAPTER FOUR: DISCUSSION</b>	34
Children and Mothers' Racial Attitudes	34
Mothers' Racial Socialization Strategies and Beliefs	36
Mothers' and Children's Nonverbal Behavior in Cross-Race Interaction	38
Predictors of Children's Behavior in Cross-Race Interaction	40
Summary	41
Tables	43
Appendix A Recruitment Materials	57
Appendix B Children's Measure (Sorting Task and Script)	62
Appendix C Black-White Evaluative Trait Scale For Use with Moms and Children	67
Appendix D Social Distance Scale for Use with Moms and Children	69
Appendix E Demographics	72
Appendix F Self-Reported Experience and Expression	75
Appendix G Racial Socialization	76
Appendix H Mother and Child Intergroup Contact	78

Appendix I	Valuing of Diversity	81
Appendix J	Prejudice Theories	83
Appendix K	Prejudice Concerns	84
Appendix L	Prejudice Concerns About Child	85
Appendix M	Colorblind Ideology	86
Appendix N	Fear of Discussing Race	87
Appendix O	Nonverbal Coding Scheme	88
<b>REFERENCES</b>		89

### **List of Tables**

Table 1:	Relations Among Measures of Mothers' and Children's Nonverbal Behavior in the Lab	43
Table 2:	Relations Among Measures of Mothers' Interracial Contact	44
Table 3:	Relations Among Measures of Child's Interracial Contact	45
Table 4:	Means, Standard Deviations, Ranges, and Relations Among Measures for Mothers' Racial Attitudes	46
Table 5:	Regression Estimates of Effects for Mothers' Racial Beliefs on Perceived Experience of Negative Behaviors	47
Table 6:	Regression Estimates of Effects for Mothers' Racial Beliefs on Perceived Experience of Positive Behaviors	48
Table 7:	Regression Estimates of Effects for Mothers' Racial Beliefs on Perceived Expression of Negative Behaviors	49
Table 8:	Regression Estimates of Effects for Mothers' Racial Beliefs on Perceived Expression of Positive Behaviors	50

Table 9:	Relations Among Measures of Mothers' and Children's Nonverbal Behavior in the Lab	51
Table 10:	Relations Among Measures of Mothers' Interracial Contact	52
Table 11:	Relations Among Measures of Child's Interracial Contact	53
Table 12:	Means, Standard Deviations, Ranges, and Relations Among Measures for Mothers' Racial Attitudes	54
Table 13:	Regression Estimates of Effects for Mothers' Racial Beliefs on Perceived Experience of Negative Behaviors	55
Table 14:	Regression Estimates of Effects for Mothers' Racial Beliefs on Perceived Experience of Positive Behaviors	56

## **Chapter One: Introduction**

The racial landscape of the United States is changing rapidly. By the year 2050, over half of all individuals under the age of 18 are expected to be non-European American (e.g., African American, Asian American, Latino, etc.; US Census, 2010). With the increasing opportunity for cross-race interactions among children, it is important to understand how young children develop racial attitudes. Past research has shown that children notice race as young as three months of age (Katz & Downey, 2002) and form racial stereotypes by three years of age (Nesdale, 2001). Children's racial attitudes are predicted by several contextual variables (i.e., diversity of schools and neighborhoods; Allport, 1954; Margie, Killen, Sinno, & McGlothlin, 2005; McGlothlin & Killen, 2010). Another possible source of information about race for young children is their parents. Although parents' explicit racial attitudes are only weakly correlated with their children's racial attitudes (Aboud & Doyle, 1996; Pahlke, Bigler, & Suizzo, 2012), parental behavior may be a more useful predictor of their children's racial biases. Research suggests that adults' social networks are an important marker of racial attitudes (Rohrbach & Bigler, in prep; Wout, Murphy, & Steele, 2010). Consistent with this view, Pahlke et al. (2012) reported that the racial diversity of mothers' social network (i.e., percentage of non-White friends) was positively correlated with a child's racial attitudes.

However, no study to date has examined the role of parents' behavior in cross-race interactions on their children's racial attitudes.

The goal of the present study is to elucidate the roles of mothers' social networks, racial attitudes, and behavior during interactions with cross-race individuals in shaping children's racial attitudes. Specifically, we sought to test the hypothesis that Asian American, European American, and Latino mothers who behave in a warm and friendly manner in an interaction with an African American confederate will have children who endorse more positive attitudes toward African Americans, whereas Asian American, European American, and Latino mothers who behave in an anxious or avoidant manner in an interaction with an African American confederate will have children who endorse more negative attitudes toward African Americans. Additionally, we investigated the role of individual differences in predicting mothers' nonverbal behavior in the cross-race interactions.

The present study is guided by the following four questions: 1) Do mothers and their children's racial attitudes resemble each other? 2) Are mothers and their children knowledgeable about each other's racial attitudes? 3) Do mothers' nonverbal behaviors during cross-race interactions influence their child's racial attitudes? 4) Which maternal behaviors during cross-race interaction predict children's racial attitudes and can these behaviors be predicted by a host of individual differences (i.e., diversity of mothers' friendship network, racial attitudes, situational diversity, theories of prejudice, and colorblindness)?

### **Theoretical Perspectives on Children's Racial Attitudes**

Theorists have attempted to explain children's racial attitudes as a product of their environment, personality, social identity, evolution, and cognitive abilities. Empirical evidence supporting each of these contributing factors exists, although no single perspective is successful in accounting for extant data on children's racial attitudes. The present study is grounded in the integration of two broad theoretical perspectives: intergroup contact and social learning theories.

### **Intergroup Contact Theory**

Perhaps the single most influential construct to appear in the psychological literature on intergroup attitude formation and change was termed "contact" (Allport, 1954, Pettigrew, 1986). Intergroup Contact Theory (Pettigrew, 1986) posited that quality contact, provided certain ideal expectations are met, causes individuals to reevaluate outgroup members and, as a result, decreases prejudice. However, contact alone is insufficient to reduce prejudice. Quality contact, in the form of intergroup friendships, is consistently the strongest predictor of prejudice reduction (Levin, van Laar, & Sidanius, 2003; Page-Gould, Mendoza-Denton, Alegre, & Siy, 2010, Page-Gould, Mendoza-Denton, & Tropp, 2008).

Despite a robust literature detailing the importance of intergroup friendships, developmental intergroup researchers typically investigate the role of mere intergroup exposure (i.e., the diversity of a school's student body) on children's racial attitudes (McGlothlin & Killen, 2006). Developmental intergroup researchers argue that racially diverse school contexts promote positive racial attitudes, whereas racial homogeneous promote negative racial attitudes (McGlothlin & Killen, 2006; Rutland, Cameron, Bennett &

Ferrell, 2005). What is missing from these arguments is that children often lack control over the racial diversity of their environments. Furthermore, the racial diversity of these settings is only an approximate marker of interpersonal contact. Although the absence of some racial groups (e.g., African Americans) obviates the possibility of interpersonal contact, the presence of racial diversity does not guarantee such contact. Like social psychology, it is important for developmentalists to identify the *types* and *qualities* of interracial contact associated with positive racial attitude formation and change (i.e., friendships). Thus, it may be that children look toward significant others for information regarding racial relations. Social learning theory (Bandura, 1977) constitutes an important theoretical account of the processes by which children's environments shape their intergroup attitudes.

### **Social Learning Theory**

Social learning theory posits that learning can occur via observation (Bandura, 1977). Evidence suggests that children can learn information or behaviors ranging from vocabulary (Hutson & Wright, 1998) to aggressive behavior (Anderson & Bushman, 2001) by watching and observing others (Bandura, 1986; Maccoby & Martin, 1983; Piaget, 1962; Rogoff, 2003; Tomasello, 1999). Additionally, the theory has been used to explain moral and gender-role development (Miller, 2010). With regard to racial attitudes, Allport (1954) argued that children learn prejudice by observing and mimicking important others (e.g., parents, teachers, peers).

Although logical in its assumption, social learning approaches to social stereotyping and prejudice have yielded inconsistent results. That is, children's levels of



social stereotyping and prejudice are rarely strongly related to those of their parents (see Bigler & Liben, 2006). One explanation for the lack of overlap may be that parents do not discuss race with their children (i.e., colorblindness; Knight, Bernal, Garza, Cota, & Ocampo, 1993; Pahlke et al., 2012), and thus that children do not learn racial attitudes via explicit instruction. One possibility, which is consistent with social learning theory but is understudied, is that parents' nonverbal behavior plays a role in shaping children's racial attitudes. Aboud (2005) hypothesized that parents and other socializers may influence children's racial attitudes. Specifically, she hypothesized that parents' quality of interracial contact, rather than mere exposure, predicts children's racial attitudes. So, for example, observing one's mother have warm, affectionate friendships with outgroup members may promote more positive attitudes than mere exposure to outgroup members.

### **Parental Effects on Children's Racial Attitudes**

Evidence for a relation between mothers' and their children's racial attitudes is inconsistent (Aboud & Doyle, 1996; Pahlke et al., 2012; Pushkin, 1967), suggesting that the process by which parents influence their children's attitudes is complex. Pahlke et al. (2012) reported that children's and their mothers' racial attitudes were unrelated, echoing past research. They also found that mothers with a higher percentage of African American friends had children with more positive racial attitudes than mothers with a lower percentage of cross-race friends. It may be that mothers socialize their children's racial attitudes via an indirect (even unintentional) pathway, with the result that children's explicit racial attitudes do not match those of their mothers. Such a pathway may be their relationships with cross-race others.

## **Racial Socialization**

Racial socialization is generally defined as race-related communications to children from parents (Hughes & Johnson, 2001). Racial socialization has been studied most often within African American families and, to a lesser extent, in Latino families in the U.S. (e.g., Hughes, 2003; Hughes et al., 2006; Phinney & Chavira, 1995). Racial socialization among African Americans is the relatively common practice (Thornton, Chatters, Taylor, & Allen, 1990) by which adults socialize healthy (physically and emotionally) children in a world in which African Americans are perceived negatively (Peters, 1985). Racial socialization among African Americans can either be explicit (e.g., family discussion, direct instruction) or implicit (e.g., children's observations of parents interacting with same-race or cross-race individuals; Murray & Mandara, 2002; Thornton, et al., 1990).

Racial socialization among European American families is understudied. To date, only one study (Pahlke, et al., 2012) has investigated the role of parental racial socialization and children's racial attitudes among European Americans. Pahlke et al. (2012) videotaped European American mothers' while reading two race-themed books to their 4- to 5-year-old children and then completed surveys concerning their racial attitudes and behaviors. Results indicated that nearly all mothers adopted "colormute" and "colorblind" approaches to socialization. That is, the mothers were hesitant to discuss race with their child. Instead, mothers opted for a colorblind approach, which failed to prevent their children from developing negative racial attitudes.

Although European American mothers may not engage in explicit verbal racial socialization with young children, such mothers may socialize their children through other

race- related behaviors. For example, mothers may structure their children's lives in a manner that encourages the development of pro-European American or anti-African American attitudes (e.g., sending a child to an all-White versus racially integrated school). More pertinent to the current study, children may view their mothers' behavior in same-race and cross-race interactions and make inferences about their mothers' attitudes about race, and in turn, develop more or less biased racial attitudes themselves.

### **The Present Study**

Children's racial attitudes may result from indirect parental racial socialization via observational learning. That is, parents' behavior during cross-race interactions may convey race-related information to children and serve as a model for appropriate behavior in cross-race interactions that children will internalize and imitate. Research on children's racial attitudes suggests that the parent-child relationship is inconsistent, with some studies reporting a strong correlation between children's and their parents' racial attitudes (Bird, Monachesi, & Brudick, 1952; Goodman, 1952; Mosher & Scodel, 1960; Radke & Trager, 1950) and others studies reporting no relation at all (Aboud & Doyle, 1996; Pahlke et al. 2012; Pushkin, 1967). The inconsistency may be a function of historical changes in racial attitudes and hence parents' behavior. In earlier studies (circa 1950s), racially biased parents may have been more likely to directly and explicitly convey their biased attitudes to their children via verbal means. Today, many parents, perhaps especially European American parents, appear to adopt a colorblind racial ideology that leads them to avoid discussion about race with their children (Pahlke et al., 2012),

thereby leading children to rely on other cues concerning their parents' attitudes about race.

Although European American mothers avoid discussing race with children (Kofkin, Katz, & Downey, 1995; Pahlke, et al., 2012), they are nonetheless likely to engage in a range of other behaviors that, according to socialization research, may influence their children. For instance, parents' social interactions with others may influence the perception and expectations children have for others. With regard to race, children pay close attention to and learn from ingroup members' behaviors in intergroup interactions (Castelli, De Dea, & Nesdale, 2008). But does children's observation of parents' nonverbal behavior influence their attitudes? Past research on gender development provides support for this notion (McHale, Crouter, & Whiteman, 2003). Therefore it is likely that a mother's nonverbal behavior in cross-race interactions would be particularly informative regarding racial relations for children.

I hypothesize that young children learn about race through observing their mothers' nonverbal behavior in cross-race interactions. Specifically, I predict that mothers who exhibit warm, friendly, and affectionate nonverbal behavior toward a person of color should have children with more positive racial attitudes. Conversely, mothers who are indifferent, anxious, or fearful in a cross-race interaction should have children with more negative racial attitudes. To test this hypothesis, mothers were filmed interacting with an African American confederate in the presence of their child. Mothers and children then completed two measures of attitudes toward African Americans. Additionally, mothers completed a host of measures assessing racial prejudice, ideology, situational diversity, and

diversity of social networks. We expected that mothers' nonverbal behavior would predict their children's racial attitudes. Furthermore, we hypothesized that mothers' scores on several individual differences measures (for a detailed list see Methods section) would predict mothers' nonverbal behavior.

## Chapter Two: Methods

### Participants

Participants included 88 individuals: 44 mothers and their 44 children (21 girls and 23 boys) participated. Participants were recruited via a university-affiliated research lab (see Appendix A for recruiting methods) and told they would be participating in a study investigating “how children learn from storybooks.” (As noted below, fully informed consent was obtained mid-way through the experimental procedure.) The majority of mothers ( $n = 33$ ) identified themselves as White, Caucasian, or European Americans; three mothers identified themselves as Asian, five identified as Latina, and three identified as White/Asian biracial. Most mothers ( $n = 29$ ) identified their children as White, Caucasian, or European American; one child was identified as Asian, six children were identified as Latino(a), and eight children were identified as mixed (five White/Latino and three White/Asian biracial). The very small number of Asian American, Latino, and biracial mothers made it impossible to statistically test for variations in race-related attitudes and behavior across mothers’ ethnicity. However, none of the mothers were African Americans and thus all mothers interacted with a racial out-group member (i.e., an African American confederate)—and all children were asked about their attitudes toward a racial outgroup (i.e., African Americans)—during the study.

Mothers ranged in age from 29 to 48 years ( $M = 39.54$ ,  $SD = 6.94$ ). Most mothers were married (95.5%) and owned their own home (88.6%). All mothers had graduated from high school, 45.7% had graduated from college, and 47.7% had attended some post-

baccalaureate training. The mothers' partners were also highly educated (87.8% had at least a college degree). Their children ranged in age from four to six years ( $M = 5.31$ ,  $SD = .67$ ). Fifty-nine percent of children attended preschool (7 to 40 hours per week,  $M = 17.89$ ,  $SD = 15.77$ ). On average, mothers tended to be more politically liberal ( $M = 5.05$ ,  $SD = 1.59$ ).

### **Procedure**

Participants (mother-child dyads) arrived at the Children's Research Lab. The mothers were told a cover story for the nature of the study (reading storybooks) and mothers were asked to consent for both themselves and their child. Once consented, mothers and their child were escorted to a room in which an African American research assistant was sitting. Mothers engaged in an unstructured interaction with the confederate for four minutes. The interaction was filmed.

Once the four minutes ended, the experimenter entered, allowed the African American confederate to leave, and gave mothers a storybook to read (*David's Drawings*). After reading the book, the experimenter explained to the mother the true purpose of the study. The experimenter then led the mother to an adjoining room to complete her measures online while the experimenter assessed the child. At the end of the session, mothers and children were debriefed and thanked. Children received a small trinket for their participation.

### **Child Measures**

**Sorting task.** Children's racial attitudes assessments were preceded by a picture sorting task in order to determine the labels that children use for African Americans and

European Americans. Children were shown photographs of 16 individuals (8 African American, 8 White; 8 female, 8 male; 8 children, 8 adults) and asked to successively sort the individuals into two groups. After each sort (e.g., by age, gender, race), children were asked to label the groups. The child-generated labels for the racial groups were used to introduce children to the labels used in the racial attitudes measures (see below) and ensure that children understand that these labels apply to African Americans and European Americans (see Appendix B for verbatim procedure).

***Trait ratings.*** Children completed the Black/White Evaluative Trait Scale (BETS; Hughes, Bigler, & Levy, 2007; see Appendix C for full measure). The BETS scale consists of ten traits that vary in positive-negative valence. Positive traits include nice, pretty, honest, generous, and happy. Negative traits include cruel, bad, dumb, awful, and selfish. The measure was given for each race (White and Black). For example, children were asked, “How many Black [White] people are \_\_\_\_\_?” using a five-point scale (1 = hardly any or none; 2 = not many; 3 = some; 4 = a lot; and 5 = almost all). A visual representation of the five-point scale was used to ensure that the children understood the possible choices (see Appendix B). Children’s attitudes toward European Americans were computed by reverse scoring the negative trait items, and then averaging the 10 European American-targeted items for a mean score of attitudes toward European Americans ( $\alpha = .80$ ). The same procedure was used to create a mean score of attitudes toward African Americans ( $\alpha = .77$ ). A total trait rating was created by subtracting the attitudes toward African Americans scale from the attitudes toward European Americans scale. Possible scores range from -4 to 4, with positive scores indicating pro-European



American bias, negative scores indicating pro-African American bias, and scores near 0 indicating low levels of racial bias.

***Social distance ratings.*** Children answered five items from the Ethnic Social Comfort Scale (ESCS; Rollock & Vrana, 2005). Children were asked, “How happy would you be to have a Black (teacher, friend, neighbor, doctor, babysitter)?” Response options were: “very happy” (5), “a little happy” (4), “unsure” (3), “a little unhappy” (2), and “very unhappy” (1). Children used a visual representation of the scale that consists of happy faces and sad faces (see Appendix D). The scale was reliable ( $\alpha = .79$ ).

***Estimate of mothers’ trait and social distance ratings.*** As in Pahlke et al. (2012), children were asked to predict their mothers’ responses to the items on the BETS and Social Comfort Scale (see Appendix C and D, respectively). The scales were reliable ( $\alpha$ s = .84, .82, and .83 for the attitudes toward European Americans, attitudes toward African Americans, and the Social Comfort scales, respectively).

***Observers’ ratings of child’s nonverbal behavior during interracial interaction.*** The authors used the same coding procedure as outlined in Weisbuch, Pauker, and Ambady (2009). Four coders (1 African American, 3 European Americans) who were blind to participants’ racial attitudes independently rated the children’s behavior along six dimension: 1) friendliness, 2) comfort or ease, 3) initiation of conversation with the confederate, 4) avoidance of conversation with the confederate, 5) the frequency of which the child was touching the mother, and 6) prejudice level. Ratings ranged from “not at all” (1) to “quite a lot” (6). The complete coding scheme along with instructions is located in Appendix X. Avoidance of conversation and prejudice scores were reverse

coded and, for ease of interpretation, relabeled openness and non-prejudice, respectively. First, interrater reliability analyses were conducted for raters' scores on each of the six dimensions. With the exception of initiating conversation, interrater reliability was high ( $\alpha$ s = .88, .70, .43, .73, .90, .70, for friendly, at ease, initiate, avoid, touch, and prejudice, respectively). Scores for initiating conversation were dropped. Additionally, because the frequency of mom and child contact was not significantly correlated with the other variables, this dimension was dropped as well (see Table 1). Scores along the remaining dimensions (friendliness, ease, openness to conversation, and non-prejudice) were averaged across the four raters. These four scores (i.e., friendliness, ease, openness to conversation, and non-prejudice) were all strongly related to each other (all  $r$ s > .56; see Table 1) and thus a composite score representing the positivity of the nonverbal interaction was formed, with higher scores indicating more positive interactions. The scale was reliable ( $\alpha$  = .77).

## **Maternal Measures**

***Demographics.*** Mothers completed a demographics questionnaire concerning their age, education, political ideology, relationship status, number of children, individual ethnic identity, child's ethnic identity, and ethnic identity of the child's father. Items appear in Appendix E.

***Self-perception of behavior during interracial interaction.*** Mothers rated their own experience of, and behavior during, the interracial interaction. Specifically, mothers rated the extent to which they a) *experienced* and b) *expressed* six emotions (3 negative, 3 positive) during the interaction: 1) nervousness, 2) indifference, 3) coldness, 4) interest,

5) affiliation, and 6) warmth. Each emotion was rated on a five-point Likert scale from “not at all” (1) to “a lot” (5). For *experienced* emotion, the scale for negative emotion was unreliable ( $\alpha = .13$ ). The scale for positive emotion was reliable ( $\alpha = .70$ ). Composite scores for experienced positive and negative emotions were created, with higher scores indicating a higher prevalence of that emotion.

For *expressed* emotion, the scale for negative emotion showed moderate reliability ( $\alpha = .56$ ), whereas the scale for positive emotion showed high reliability ( $\alpha = .86$ ). Composite scores for expressed positive and negative emotions were created, with higher scores indicating a higher prevalence of that emotion.

***Observer ratings of mothers’ nonverbal behavior during interracial interaction.***

The coding procedure was identical to that used for child’s nonverbal behavior. Four coders (1 African American, 3 European Americans) who were blind to participants’ racial attitudes rated mothers’ behavior along five dimensions: 1) friendliness, 2) comfort or ease, 3) initiation of conversation with the confederate, 4) avoidance of conversation with the confederate, and 5) prejudice level. Avoidance of conversation and prejudice scores were reverse coded and, for ease of interpretation, relabeled openness and non-prejudice, respectively. Ratings ranged from “not at all” (1) to “quite a lot” (6). The complete coding scheme along with instructions is located in Appendix X. Interrater reliability was conducted on the five dimensions. With the exception of initiating conversation, interrater reliability was high ( $\alpha$ s = .88, .76, .55, .73, .81, .76, respectively), and thus scores for initiating conversation were dropped. ). Scores along the remaining dimensions (friendliness, ease, openness to conversation, and non-

prejudice) were averaged across the four raters. These four scores (i.e., friendliness, ease, openness to conversation, and non-prejudice) were all strongly related to each other (all  $r_s > .49$ ; see Table 1) and thus a composite score representing the positivity of the nonverbal interaction was formed, with higher scores indicating more positive interactions. The scale was reliable ( $\alpha = .88$ ).

***Trait ratings.*** Mothers completed a trait-based measure of racial attitudes (Black-White Evaluative Trait Scale, BETS, Hughes & Bigler, 2007; see Appendix C). The scale consists of five positive (nice, pretty, honest, generous, happy) and five negative (cruel, bad, dumb, awful, selfish) traits. Mothers were asked, “How many Black [White] people are \_\_\_\_\_?” Response options included “almost all” (5), “a lot” (4), “some” (3), “not many” (2), and “hardly any or none” (1). The BETS was administered once for each target race, with order counterbalanced across participants. Mothers’ attitudes toward European Americans was computed by reverse scoring the negative trait items, and then averaging the 10 European American-targeted items for a mean score of attitudes toward European Americans ( $\alpha = .75$ ). The same procedure was used to create a mean score of attitudes toward African Americans ( $\alpha = .76$ ). A total trait rating was created by subtracting the attitudes toward African Americans scale from the attitudes toward European Americans scale. Possible scores range from -4 to 4, with positive scores indicating pro-European American bias, negative scores indicating pro-African American bias, and scores near 0 indicating low levels of racial bias.

***Social distance ratings.*** Mothers completed a revised version of the Ethnic Social Comfort Scale (Rollock & Vrana, 2005; see Appendix D). Specifically, mothers rated

their agreement with the statement, “I would be happy to have a Black \_\_\_\_”: (a) teacher for my child, (b) friend, (c) neighbor, (d) doctor, and (e) babysitter. Response options included “strongly disagree” (1), “disagree” (2), “slightly disagree” (3), “uncertain” (4), “slightly agree” (5), “agree” (6), and “strongly agree” (7). Mothers’ responses were converted to a 5-point scale, so that the resulting scale paralleled the scale used with children. The re-scaled measure was reliable ( $\alpha = .98$ ).

***Estimate of their children’s trait and social distance ratings.*** Mothers estimated their children’s responses on the BETS (i.e., trait-based measure of racial attitudes) and Social Comfort Scale (see Appendix C and D, respectively). The scales were reliable ( $\alpha$ s = .87, .91, and .93 for the attitudes toward European Americans, attitudes toward African Americans, and the Social Comfort scales, respectively).

***Current racial socialization behaviors.*** Mothers completed a modified version of the Parental Racial-Ethnic Socialization Behaviors measure by Hughes and colleagues (Hughes & Chen, 1997; Hughes & Johnson, 2001; see Appendix G). This scale required mothers to rate the frequency with which they discussed each of a series of messages about race with their child (i.e., “How often do you tell your child \_\_\_\_?”). Response options included: “never” (1), “rarely” (2), “sometimes” (3), “often” (4), “very often” (5). The questionnaire contains four subscales: *Egalitarianism* (e.g., “people are equal, regardless of their race or ethnic background”), *History of Other Groups* (e.g., “about important people in the history of *other* racial or ethnic groups”), *Discrimination Against Other Groups* (e.g., “people from *other* racial or ethnic groups are sometimes still discriminated against because of their race or ethnicity”), and *Preparation for Bias* (e.g.,

“about the possibility that some people might treat him or her badly or unfairly because of our race or ethnicity”). All subscales were reliable ( $\alpha$ s = .82, .82, .87, and .78, respectively).

***Interracial contact.*** Mothers were asked about the racial composition of: (1) the neighborhood in which they spend most of their time, (2) the religious services in which they participate (if any), (3) the activities in which they participate, (4) their workplace, (5) their alma maters, if they attended college, and (6) their former high schools (see Appendix H). For each of the five areas, mothers provided an estimate of the individuals who are: (1) White, (2) Black or African American, (3) Latino or Hispanic, (4) Asian, and (5) Other racial or ethnic background. With the exception of ratings of the diversity of one's high school, levels of diversity were correlated across contexts (e.g., mothers' friendship network, college, activities, religious services, and neighborhood;  $r$ s > .30,  $p$ s < .05; see Table 2). A composite score was created using these items, with higher scores indicating a greater level of diversity ( $\alpha$  = .61). When removing workplace diversity, the reliability increases to form a more reliable composite ( $\alpha$  = .91); therefore, we created a final composite of mothers' diversity that includes mothers' friendships, college, activities, religious services, and neighborhoods.

***Children's interracial contact.*** For the child's level of interracial contact, mothers were asked about the racial composition of (1) their child's preschool, (2) the neighborhood in which their child spends most of his or her time, and (3) the religious services in which their child participates (if any), (4) extracurricular activities in which the child participates, and (5) their child's friends (see Appendix H). For each of the five

areas, mothers provided an estimate of the racial composition for each of the following: (1) White, (2) Black or African American, (3) Latino or Hispanic, (4) Asian, and (5) Other people in each of the areas. Correlations of these measures (see Table 3) indicate that the level of diversity in a child's neighborhood, religious services, extracurricular activities, and friendship network were highly related ( $r_s > .42, p_s < .05$ ). A composite score was created, with higher scores indicating a greater level of diversity ( $\alpha = .70$ ).

***Valuing of diversity.*** Mothers completed a 6-item scale designed to assess the extent to which individuals value racial diversity when it conflicts with other valued goals (e.g., school achievement records, neighborhood crime statistics, distance from community center, quality of religious services, quality of retail shops, successful children sports teams; see Appendix I). Responses are scaled on a 6-point Likert scale with 1 (*Ethnic diversity is much less important than...*) to 6 (*Ethnic diversity is much more important than*\_\_\_). The scale was highly reliable ( $\alpha = .83$ ). Responses were averaged to create a composite score, with higher scores indicating a greater valuing of diversity relative to competing goals.

***Theories of Prejudice.*** Mothers' views about the malleability of prejudice were assessed using the Theories of Prejudice Scale (Carr, Dweck, & Pauker, 2012; see Appendix J). Participants rated the extent to which they believed prejudice to a fixed characteristic. Response options ranged from 1 (very strongly disagree) to 6 (very strongly agree). Sample items include: "People have a certain amount of prejudice and they can't really change that," "No matter who somebody is, they can always become a lot less prejudiced [reverse coded]". The scale was highly reliable ( $\alpha = .80$ ). Scores

were averaged to create a general theory of prejudice composite, with higher scores indicating greater entity theories of prejudice.

***Prejudice concerns.*** Mothers' concerns about appearing prejudiced were assessed using a modified version of the Prejudice Concerns scale used by Carr et al. (2012; see Appendix K). Mothers rated the extent to which they have concerns about behaving in a prejudiced manner and having prejudiced thoughts. Response options ranged from 1 (very strongly disagree) to 6 (very strongly agree). Sample items include: "I am very concerned that something I do or say when talking to someone with a different skin color might be labeled prejudiced (behavior)," and "When I think about talking to someone of a different ethnicity, I am worried I might have inappropriate thoughts or feelings (thoughts)." The scale was highly reliable ( $\alpha = .91$ ). Scores were averaged to create a general prejudice concern measure, with higher scores indicating greater concerns about appearing prejudiced.

***Prejudice concerns about child.*** Mothers' concerns about their child appearing prejudiced were assessed using an adaptation of the Prejudice Concerns scale used by Carr et al. (2012; see Appendix L). Mothers rated the extent to which they worry about their child's behavior and thoughts in cross-race interactions. Response options ranged from 1 (very strongly disagree) to 6 (very strongly agree). Sample items include: "When talking to a person of a different ethnicity, I am worried my child might say something that will make him/her look prejudiced (behavior)," "When my child thinks about talking to someone of a different ethnicity, I am worried that he/she might have inappropriate thoughts or feelings (thoughts)." The scale was highly reliable ( $\alpha = .90$ ). Scores were



averaged to create a general prejudice concern measure, with higher scores indicating mothers' increased concern about their child appearing prejudiced.

***Colorblind Ideology.*** Mothers' level of colorblind ideology was measured using a 6-item measure created by the authors (see Appendix M). Mothers rated the extent to which they believe in minimizing racial differences, avoiding talking about race, and have a lack of awareness of racial inequality (i.e., colorblindness). Sample items include: "I think it's best to avoid mentioning someone's race when talking about or describing someone," "I am afraid that if I mention race, people will think I am prejudiced," "Racism doesn't exist in our society anymore." Response options ranged from 1 (very strongly disagree) to 6 (very strongly agree). The scale was reliable ( $\alpha = .74$ ).

***Fear of discussing race.*** Mothers' rated the extent to which they fear discussing race with their child because it might lead the child to be more biased on a five-item scale created for use in this study (see Appendix N). Sample items include: "I fear that talking about race with my child will draw his or her attention to race unnecessarily," "I don't know what my child understands about race at his age," and "I don't know what to say about race that will lead my child to be unbiased." Response options ranged from "very strongly disagree" (1) to "very strongly agree" (6), and thus higher scores indicate mothers' greater fear of discussing race with their child. The scale was highly reliable ( $\alpha = .84$ ).

## Chapter Three: Results

### Overview of Data Analysis Plan

Data analysis occurred in the four steps. In the first step, I provided descriptive information about (a) children's and mothers' racial attitudes, (b) children's estimates of their mother's racial attitudes, (c) mothers' estimates of their children's attitudes, and (d) correlational analyses of the relations among these variables (see Table 4).

In a second step, I provide descriptive information about mothers' self-reported socialization behavior, racial beliefs, and intergroup contact. Additionally, I conducted several regressions to test the hypothesis that the diversity of mothers' social networks predicts mothers' racial attitudes and their children's racial attitudes.

In a third step, I provide descriptive information about mothers' and children's behavior in the room with the confederate. Additionally, I conducted several regressions to test the hypothesis that the diversity of mothers' social networks predicts mothers' behavior and their child's behavior in the room with the confederate.

### Mothers' and Children's Racial Attitudes

***Mothers' trait ratings.*** Mothers showed a slight pro-African American and anti-European American bias ( $M = -.03$ ,  $SD = .15$ ). Overall, mothers' trait ratings were not, however, significantly different from zero (i.e., the score associated with unbiased attitudes),  $t(41) = -1.61$ ,  $p = .11$ .

***Children's trait ratings.*** As expected, children showed a pro-European American and anti-African American bias ( $M = .23$ ,  $SD = .66$ ). Children's mean trait ratings were

significantly different than zero (i.e., the score associated with unbiased attitudes),  $t(41) = 2.30, p = .03$ . On average, children reported that more Whites than Blacks have positive traits and fewer Whites than Blacks have negative traits. There was variation in children's responses, with difference scores ranging from -.9 (indicating a slight pro-African American and anti-European American bias) to 2.7 (indicating a strong pro-European American and anti-African American bias).

***Mothers' social distance ratings.*** Overall, mothers reported feeling happy with the idea of interacting with African Americans in the five roles (i.e., neighbor, friend, doctor, teacher, and babysitter;  $M = 4.5, SD = .67$ ). Indeed, more than half of the mothers (61%) "strongly agreed" that they would feel happy interacting with an African American in *any* of the five roles.

***Children's social distance ratings.*** As expected, children – at the group level – reported that they felt uncertain about interacting with African Americans ( $M = 3.15, SD = 1.00$ ). Children's mean social distance ratings were significantly different from three (i.e., the score associated with a response of "uncertain"),  $t(42) = 23.16, p < .001$ . As with the trait ratings, there was considerable variation in children's responding.

### **Mothers' and Children's Estimates of the Others' Racial Attitudes**

***Mothers' estimate of children's trait ratings.*** Overall, mothers estimated that their children had unbiased racial attitudes ( $M = .01, SD = .23$ ); mothers' estimates of their children's trait ratings did not differ significantly from zero,  $t(43) = .38, p = .70$ . As expected, mother's ratings were unrelated to their children's actual trait ratings ( $r = -.21, p = .20$ ). That is, mothers were – at the group level – inaccurate at predicting their

children's racial attitudes. Additionally, mothers' estimates of their children's trait ratings were unrelated to their own trait ratings ( $r = -.05, p = .76$ ).

***Children's estimate of mothers' trait ratings.*** Overall, children estimated that their mothers had slightly biased attitudes ( $M = .20, SD = .57$ ). However, children's estimates of their mothers' trait ratings did significantly differ from zero,  $t(41) = 2.23, p = .03$ . As expected, children's estimates of their mothers' trait ratings were unrelated to their mothers' actual trait ratings ( $r = .01, p = .96$ ). Children's estimates of their mothers' trait ratings were, however, significantly related to their own trait ratings ( $r = .35, p < .05$ ).

***Mothers' estimate of children's social distance ratings.*** As expected, mothers were unaware of their children's actual level of happiness about interacting with African Americans. Overall, mothers estimated that children would report social distance ratings of 4.42 ( $SD = .62$ ), which was significantly higher than children's actual reported comfort level of 3.56 ( $SD = 1.01$ ),  $t(79) = -5.03, p < .001$ . Furthermore, mothers' estimates of their children's social distance ratings were unrelated to children's own reported social distance ratings ( $r = -.03, p = .84$ ). It is interesting to note, however, that mothers – at the group level – were aware that their own children felt significantly less happy than the mothers themselves felt. Unexpectedly, mothers' own social distance ratings were significantly related to their estimates of their children's social distance ratings ( $r = .57, p < .001$ ).

***Children's estimate of mothers' social distance ratings.*** Overall, children reported that their mothers were moderately comfortable with African Americans ( $M = 3.85, SD = .95$ ). As hypothesized, children's estimates of their mothers' social distance ratings were

unrelated to mothers' actual social distance ratings ( $r = .09, p = .55$ ). Children's own social distance ratings were significantly related to estimates of their mothers' social distance ratings ( $r = .51, p < .001$ ).

### **Mothers' Race-Related Behaviors and Beliefs**

**Overview.** In this section, I present descriptive information about mothers' 1) racial socialization strategies, 2) intergroup contact levels, 3) self-perceived and observed behavior during the interaction with the cross-race confederate.

**Current socialization behaviors.** Overall, mothers reported that they occasionally provided messages to their children about race; subscale means ranged from 2.0 to 2.99 of 5 possible. A repeated-measure ANOVA with racial socialization subscale (egalitarianism, history of other groups, discrimination against other groups, and preparation for bias) as the repeated measure indicated a significant main effect of message type,  $F(1, 41) = 34.42, p < .001$ . Mothers reported talking explicitly to their children about the history of other groups ( $M = 2.96, SD = .84$ ) and the importance of egalitarianism ( $M = 2.75, SD = .80$ ) more often than about discrimination against other groups ( $M = 2.12, SD = .55$ ) or preparation for bias ( $M = 1.96, SD = .83$ ). Mothers discussed discrimination more often than preparation for bias.

**Mothers' interracial contact.** Overall, mothers reported that they were situated within fairly racially diverse environments; they estimated that, on average, their children's preschools were 61.5% European American ( $SD = 24.95$ ), their neighborhoods were 65.92% European American ( $SD = 26.16$ ), their religious services were 67.12% European American ( $SD = 26.37$ ), their activities outside the home were 65.58%

European American ( $SD = 21.86$ ), their workplaces were 65.5% European American ( $SD = 23.50$ ), their former high schools were 61.91% European American ( $SD = 23.05$ ), their former colleges were 63.1% European Americans ( $SD = 14.73$ ) and their own friends were 67.73% European American ( $SD = 22.66$ ). Mothers' reported, however, that African Americans made up a relatively small percentage of the people in their daily lives, including their children's preschools ( $M = 9.21\%$ ,  $SD = 7.8$ ), their neighborhoods ( $M = 10\%$ ,  $SD = 10.8$ ), and their own friend groups ( $M = 6.41\%$ ,  $SD = 5.91$ ).

***Mothers' racial beliefs.*** Overall, mothers' reported having few concerns about appearing prejudiced ( $M = 2.71$ ), or their child appearing prejudiced ( $M = 1.19$ ) during interactions with African Americans. Means and standard deviations for all maternal racial beliefs scales are presented in Table 4.

***Mothers' self-reported behavior during the cross-race interaction.*** Mothers reported experiencing more positive emotions (warmth, interest, affiliation) than negative emotions (indifference, cold, nervous) in the interaction with the confederate ( $M = 2.57$ ,  $SD = .80$  and  $M = 1.42$ ,  $SD = .47$ , respectively;  $t(42) = -7.16$ ,  $p < .001$ ). Similarly, mothers' reported expressing more positive emotions ( $M = 2.00$ ,  $SD = .11$ ) than negative emotions ( $M = 1.39$ ,  $SD = .07$ ;  $t(43) = 3.85$ ,  $p < .001$ ). Notably, the overall level of self-reported positive emotional expression was low, with the mean corresponding to "a little."

### **Observers' Ratings of Mothers' and Children's Behavior in Cross-Race Interaction**

As described earlier, I computed a composite positivity score from observers' rating of maternal and child behavior. Overall, mothers and their children were rated as

moderately positive during the interaction,  $M_s (SDs) = 3.30 (.88)$  and  $3.65, (1.02)$ , respectively. Interestingly, children's interactions with the confederate were rated as more positive than their mothers' interactions with the confederate,  $t(42) = -1.99, p < .05$ .

### **Tests of Hypothesized Predictors of Children's Racial Attitudes**

**Overview.** Hierarchical regression models were used to test the utility of mothers': 1) racial socialization, 2) intergroup contact, and 3) racial beliefs for predicting children's racial attitudes (i.e., trait and social distance ratings).

#### ***Does mothers' racial socialization predict their children's racial attitudes?***

Mothers' four self-reported racial socialization strategies (i.e., egalitarianism, history of other groups, discrimination against other groups, or preparation for bias) were entered as predictors of children's trait ratings with children's age and mothers' education level entered as covariates. Children's age significantly predicted children's trait ratings ( $R^2 = .17, p < .01$ ). Neither mothers' education level nor the racial socialization subscale scores significantly predicted children's trait-based racial bias (see Table 5). A parallel regression using children's social distance ratings as the dependent variable indicated that none of the variables predicted children's racial attitudes (see Table 6).

#### ***Does mothers' intergroup contact predict their children's racial attitudes?***

Mothers' reports of the percentage of non-European American people in their: 1) high school, and 2) work, and 3) general intergroup contact composite score were entered as predictors of children's trait-based racial bias with children's age and mothers' education level entered as covariates. None of the models significantly predicted children's trait ratings (see Table 7). A parallel regression model using children's social distance ratings

as the dependent variable also indicated that none of the variables significantly predicted children's social distance ratings (see Table 8).

Because children's racial attitudes measures focused on their views of African Americans specifically, I also examined whether the percentage of *African Americans* within 1) children's preschools, 2) mothers' neighborhood, 3) mother's friends, 4) children's friends, and 5) children's activities predicted children's trait-based racial bias or social distance ratings. With respect to *trait-based racial bias*, the model did not significantly predict children's trait ratings ( $R^2 = .50$ ,  $\beta_s = .01, -.01, -.002, -.07, .03$ , and  $p_s = .20, .54, .95, .08$ , and  $.20$  respectively). With regard to *social distance ratings*, the previous variables were regressed on children's social distance ratings. All variables with the exception of the percent of Black friends in a mothers' social network were not significant ( $R^2 = .47$ ,  $\beta_s = .42, -.06, .68, -.45, .16$ , and  $p_s = .19, .84, .05, .15$ , and  $.56$  respectively). When all non-significant variables were removed from the model, the percent of Black friends in a mothers' social network significantly predicted their child's social distance ratings ( $R^2 = .10$ ,  $\beta = .05$ ,  $p < .05$ ).

***Do mothers' racial beliefs predict their children's racial attitudes?*** Mother's 1) valuing of diversity, 2) prejudice theories, 3) prejudice concerns, 4) prejudice concerns about their children, 5) colorblind ideology, and 6) fear of discussing race were entered as predictors of their children's trait-based racial bias with children's age and mothers' education level entered as covariates. Children's age and mothers' education level significantly predicted children's trait ratings ( $R^2 = .17$ ,  $\beta_s = .41, -.004$ ,  $p > .05$ ). However, the full model containing the covariates and maternal racial beliefs did not



predict children's trait ratings (see Table 9). None of the racial beliefs measures predicted children's trait ratings ( $R^2 = .16$ ,  $\beta_s = .12, .19, .02, -.07, .30, -.10$  and  $ps = .18, .18, .89, .70, .07$ , and  $.48$  respectively). A parallel model was run using children's social distance ratings as the dependent variable. None of the models predicted children's trait ratings (see Table 10).

### **Tests of Hypothesized Predictors of Mother's and Children's Observed Behavior**

**Overview.** Hierarchical regression models were used to measure the utility of mothers': 1) racial socialization, 2) intergroup contact, and 3) racial beliefs for predicting the level of positivity during mothers' and children's cross-race interaction.

#### ***Does mothers' racial socialization predict their own nonverbal behavior?***

Mothers' four self-reported racial socialization strategies (i.e., egalitarianism, history of other groups, discrimination against other groups, or preparation for bias) were entered as predictors of the positivity of mothers' nonverbal interaction. None of the subscale scores (egalitarianism, history of other groups, discrimination against other groups, or preparation for bias) significantly predicted mothers' nonverbal behavior ( $R^2 = .07$ ,  $p = .56$ ;  $\beta_s = .2, .11, .03, -.38$  and  $ps = .39, .57, .93, .17$ , respectively).

#### ***Does mothers' racial socialization predict their child's nonverbal behavior?***

Mothers' four self-reported racial socialization strategies (i.e., egalitarianism, history of other groups, discrimination against other groups, or preparation for bias) were entered as predictors of children's nonverbal behavior. None of the subscale scores (egalitarianism, history of other groups, discrimination against other groups, or preparation for bias)

significantly predicted children's nonverbal behavior ( $R^2 = .06$ ,  $p = .64$ ;  $\beta$ s = .04, -.35, -.16, .00 and  $p$ s = .87, .12, .74, 1.0, respectively).

***Does mothers' intergroup contact predict their own nonverbal behavior?***

Mothers' reports of the percentage of non-European American people in their: 1) high school, and 2) work, and 3) general intergroup contact composite score were entered as predictors of mothers' behavior during the interaction with the confederate. Diversity in the mother's workplace was the strongest predictor of mothers' nonverbal behavior ( $R^2 = .11$ ,  $\beta$ s = -.01,  $p < .05$ ).

***Does mothers' intergroup contact predict their children's nonverbal behavior?***

Mothers' reports of the percentage of non-European American people in their: 1) child's preschool, 2) high school, and 3) work, and 4) general intergroup contact composite score were entered as predictors of children's nonverbal behavior during the interaction with the confederate. Diversity in the preschool, high school, work, and the general intergroup composite did not significantly predict children's nonverbal behavior ( $R^2 = .13$ ,  $\beta$ s = .02, -.02, -.02, -.002, and  $p$ s = .32, .43, .45, and .95 respectively).

***Do mothers' racial beliefs predict their own nonverbal behavior?*** Mothers' reports of racial beliefs in: 1) valuing of diversity, 2) prejudice theories, 3) prejudice concerns, 4) prejudice concerns about their children, 5) colorblind ideology, and 6) mothers' fear of discussing race were entered as predictors of their own nonverbal behavior. None of the variables significantly predict mothers' nonverbal behavior ( $R^2 = .01$ ,  $\beta$ s = -.03, -.03, -.11, .16, .09, .02 and  $p$ s = .80, .84, .67, .53, .68, and .89, respectively).

***Do mothers' racial beliefs predict their child's nonverbal behavior?*** Mothers' reports of racial beliefs in: 1) valuing of diversity, 2) prejudice theories, 3) prejudice concerns, 4) prejudice concerns about their children, 5) colorblind ideology, and 6) mothers' fear of discussing race were entered as predictors of children's nonverbal behavior. Mother's valuing of diversity, prejudice theories, prejudice concerns, prejudice concerns, colorblind ideology, or mothers' fear of discussing race did not significantly predict children's nonverbal behavior ( $R^2 = .24$ ,  $\beta_s = .12, .19, .02, -.07, .30, -.10$  and  $p_s = .18, .18, .89, .70, .07$ , and  $.48$  respectively).

***Do mothers' racial attitudes predict their nonverbal behavior?*** In two separate regressions, mothers' trait ratings and social distance ratings were regressed on their own nonverbal behavior in the cross-race interaction. Mothers' trait ratings did not predict their nonverbal behavior ( $R^2 = .01$ ,  $\beta = -.68$ ,  $p = .45$ ). However, mothers' social distance ratings did significantly predict their own nonverbal behavior in the interaction ( $R^2 = .12$ ,  $\beta = .45$ ,  $p < .05$ ). That is, mothers who expressed more comfort with having close relationships with African Americans were more likely to have positive nonverbal behavior in the cross-race interaction with the African American confederate.

***Do children's racial attitudes predict their nonverbal behavior?*** In two separate regressions, children's trait ratings and social distance ratings were regressed on their own nonverbal behavior in the cross-race interaction. Children's trait ratings did not predict their nonverbal behavior ( $R^2 = .04$ ,  $\beta = -.31$ ,  $p = .21$ ). Interestingly, children's social distance ratings significantly predicted their own positive behavior in the interaction ( $R^2 = .13$ ,  $\beta = -.37$ ,  $p < .05$ ). That is, children who expressed that they would

be more comfortable with close relationships with African Americans were more likely to exhibit positive nonverbal behavior in the interaction with the African American confederate.

### **Tests of Predictors of Mothers' Experienced and Expressed Emotion During the Cross-Race Interaction**

*Mothers' self-perceived experience of negative behaviors.* Mothers' reports of beliefs in: 1) valuing of diversity, 2) prejudice theories, 3) prejudice concerns, 4) prejudice concerns about their children, 5) colorblind ideology, and 6) mothers' fear of discussing race were entered as predictors of their *self-perceived experiencing* of three negative nonverbal behaviors (nervousness, coldness, and indifference). Mothers' valuing of diversity, prejudice theories, prejudice concerns, and prejudice concerns about their children, colorblind ideology, and fear of discussing race did not significantly predict mothers' experienced a) nervousness, b) coldness, or c) indifference (See Table 11).

Finally, mothers' reports of racial beliefs in: 1) valuing of diversity, 2) prejudice theories, 3) prejudice concerns, 4) prejudice concerns about their children, 5) colorblind ideology, and 6) mothers' fear of discussing race were entered as predictors of the degree to which they experienced positive emotions (as assessed by a composite score; see above). Results indicated that none of the six variables predicted the experience (see Table 12) of positive emotions during the cross-race interaction.

*Mothers' self-perceived expression of negative behaviors.* Mothers' reports of their 1) valuing of diversity, 2) prejudice theories, 3) prejudice concerns, 4) prejudice concerns about their children, 5) colorblind ideology, and 6) fear of discussing race were

entered as predictors of their *self-perceived expression* of three negative nonverbal behavior (nervousness, coldness, and indifference). Mothers' prejudice theories, prejudice concerns, and fear of discussing race did not significant predict mothers' experienced a) nervousness, b) coldness, or c) indifference (see Table 13).

Finally, mothers' reports of their: 1) valuing of diversity, 2) prejudice theories, 3) prejudice concerns, 4) prejudice concerns about their children, 5) colorblind ideology, and 6) fear of discussing race were entered as predictors of the degree to which they expressed positive emotions (as assessed by a composite score; see above). Results indicated that none of the variables, with the exception of mom's fear of discussing race, predicted the expression (see Table 14) of positive emotions during the cross-race interaction. Mothers' fear of discussing race significantly predicted their self-reported expression of positive emotions in the interactions ( $R^2 = .09, \beta = .33, p < .05$ ).

### **Does Mother's Nonverbal Behavior Predict Their Children's Racial Attitudes?**

Finally, I tested my hypothesis that mothers' nonverbal behavior during the interaction with the confederate would predict their children's racial attitudes. Separate regression models were run in which mothers' nonverbal behavior was entered as a predictor of children a) trait and b) social distance ratings. Mothers' nonverbal behavior did not significantly predict either children's trait ( $R^2 = .02, \beta = .10, p = .37$ ) or social distance ratings ( $R^2 = .002, \beta = .04, p = .79$ ).

## **Chapter Four: Discussion**

Psychologist and sociologists have studied the nature of children's racial biases for decades. Yet, we still know very little about the role of parents in shaping their children's racial attitudes. The primary goal of the current study was to examine the ways in which mothers influence their young children's racial attitudes, especially through nonverbal behavior. This study makes a contribution to the literature on racial attitude development in that it is the first study to examine the potential influence of maternal modeling of behavior during an actual cross-race interaction on children's racial attitudes. First, I examined mothers' and children's own racial attitudes – and their awareness of each others' attitudes – in an attempt to understand the extent to which Asian American, European American, and Latino mothers and children share and are aware of their attitudes toward African Americans. I also examined whether children's racial attitudes were related to a number of maternal factors, including mothers' (a) racial attitudes, (b) self-reported and observed race-related behaviors, (c) beliefs about race, and (d) nonverbal behavior in a cross-race interaction. Finally, I examined children's (a) experiences with intergroup contact, (b) racial attitudes, and (c) nonverbal behavior in a cross-race interaction.

### **Children and Mothers' Racial Attitudes**

Based on previous research (e.g., Baron & Banaji, 2006; Doyle & Aboud, 1995; Katz & Kofkin, 1997; Pahlke, et al., 2012; Persson & Musher-Eizenman, 2003), I hypothesized children would show racially biased attitudes. I measured children's racial attitudes with two previously published scales: a trait-based racial bias rating and a social

distance rating (Pahlke et al., 2012). Children's trait ratings of African Americans and European Americans supported this hypothesis. In general, the young (4- to 6-year-old) Asian, European American, and Latino children in this sample had a slight pro-European American racial bias. It is important to note, however, that, although children were, at the group level, biased, there were many children who rated African Americans and European Americans equivalently.

Children also exhibited bias on the measure of social distance. On average, children rated that they were uncertain or "just so-so" about having close relationships with African Americans. That is, the mean score indicated that children felt neither positively nor negatively about having African American friends, teachers, neighbors, doctors, and babysitters. As was true of children's trait-based ratings, results indicated that there were large individual differences among children in their social distance ratings; some children felt quite happy while others felt quite unhappy about the prospect of having close relationships with African Americans.

Like their children, mothers completed two measures of racial attitudes. These measures were identical to those completed by their children. We used identical measures for comparisons between mother and child attitudes. Mothers' trait-based ratings indicated they had a slight pro-African American racial bias. The observed ceiling effect may be attributable to several factors. The measure was an explicit racial attitudes measure; therefore, mothers were aware that their racial attitudes were being assessed and as such, mothers may have consciously tried to appear non-prejudiced. Indeed, more than half of the mothers (70%) rated African Americans and European Americans identically

for each of the traits on the scale. Mothers' responses on the social distance scale also indicated that they held pro-African American views. Mothers, in general, reported feeling very positive about the possibility of having close social relationships with African Americans.

As indexed by trait and social distance scales, mothers' racial attitudes were dissimilar from children's racial attitudes. Replicating findings by Pahlke et al. (2012), mothers' and children's attitudes were unrelated, and children's attitudes were more negative than mothers' attitudes. Mothers' failure to verbally communicate their racial attitude may explain the lack of concordance. Recent research suggests that European American mothers are reluctant to discuss race with their child and, thus mothers are typically unaware of their child's attitudes (Pahlke, et al., 2012). It is also possible, however, that mothers fail to report their racial attitudes honestly. Explicit measures of racial attitudes are susceptible to social desirability. As a result, we used mothers' self-reported race-related and observed nonverbal behavior in the interaction as an indicator of racial bias as well (discussed below).

### **Mothers' Racial Socialization Strategies and Beliefs**

Mothers reported that they only somewhat regularly provided race-related messages to their children regarding egalitarianism, the history of other racial groups, the discrimination of other racial groups, or preparation of racial discrimination of their own racial group. Prior developmental research suggests that parents' explicit messages influence children's behaviors and attitudes (e.g., Bugental & Grusec, 2006; Collins, et al., 2000). However, in the current study, mothers' explicit messages about race and race



relations were unrelated to their children's attitudes. It is possible that social desirability concerns led mothers to exaggerate the extent to which they provide these messages to their child.

Colorblind racial ideologies have become increasingly prevalent in the U.S. and are likely to influence parents' racial socialization strategies. Overall, mothers in this sample moderately endorsed colorblind ideologies. Mothers' self-reported ratings did not, however, predict children's racial attitudes. It is important to note, though, that this scale has not been validated and, as a result, we are limited in what we can extrapolate from this score. It is possible that mothers' adoption of colorblind ideology is a motivating factor for avoiding discussion of race with children, a possibility that should be investigated in future research.

In addition to colorblind ideology, we assessed mothers' views of a variety of other race-related beliefs: prejudice theories, prejudice concerns, valuing of diversity, and fear of discussing race. With regard to prejudice theories, we measured the extent to which mothers believed prejudice to be a fixed or more incremental attribute of a person. Additionally, we measured mothers' concerns about themselves and their children appearing prejudiced. For all three measures, mean values were low, indicating mothers, at the group level, viewed prejudice as a changeable personal characteristic and had very few concerns about themselves or their children appearing prejudiced. Mothers' lack of worry about appearing racially biased is likely to stem from their perception of themselves and their children as genuinely nonbiased. This would be consistent with

their non-biased responses on the trait and social distance measures, and overestimation of the positivity of their own children's racial attitudes.

With regard to valuing diversity, mothers reported valuing diversity only moderately when it was at odds with other goals (e.g., neighborhood crime statistics, school performance, quality of retail shops, etc.). Finally, mothers also reported little fear about discussing race with their child, a finding that contrasts somewhat with our results from the racial socialization measures. If mothers did not fear discussing race with their children, it seems possible that they would engage in explicit racial socialization. However, it may be that Asian American, European American, and Latino mothers have a very different conceptualization of what, when, and how to discuss race-related topics than the items included on the racial socialization measure used here. The racial socialization scale used here was modified from a measure assessing African Americans' racial socialization of their children. It is possible that African Americans and non-African Americans have very different motivations for discussing race and strategies for doing so. In sum, it appears that a lack of motivation, rather than ignorance or fear, leads mothers to avoid discussing many race-related topics with their children.

### **Mothers' and Children's Nonverbal Behavior in Cross-Race Interaction**

Counter to expectations, mothers' trait ratings were unrelated to their nonverbal behavior in the interaction – as coded by our raters. Although this finding is counter to my hypothesis, it is not surprising given previous research suggesting European Americans are rather good at monitoring and altering their behavior – so much so that minorities (e.g., African Americans) are unable to detect prejudice (Shelton, Richeson,

Salvatore, & Trawalter, 2005). Counter to this notion, we found that mothers' social distance ratings significantly predicted mothers' nonverbal behavior. It may be that social distance measures are a more accurate predictor of actual behavior in cross-race interactions. Exploring the differential role between traditional measures of racial attitudes and social distance measures on real interracial behavior would be a beneficial future research topic.

Additionally, the primary hypothesis of the current study is predicated on the assumption that young children are capable of detecting complex emotions (nervousness, indifference) in their mothers' nonverbal behavior. Young children's ability to interpret complex, subtle nonverbal behaviors (e.g., nervous fidgeting, avoidance of eye contact) in naturalistic situations has yet to be demonstrated empirically (Ambady & Weisbuch, 2010). It may be that children gradually develop the ability to detect and interpret subtle nonverbal cues across the early elementary-school years, as Ambady and Weisbuch suggest. Additional research on children's ability to interpret nonverbal behavior is needed. For instance, psychophysiological measures may be a more accurate assessment of mother to child emotional contagion or transference with regard to racial biases.

Interestingly, many of the mothers in the study were visibly warm or uncomfortable in the interaction with the confederate (as evidenced by the consensus among raters). However, the quality of mothers' behavior, as rated by observers, failed to predict their children's racial attitudes. The absence of an effect of mothers' behavior on children's racial attitudes is somewhat puzzling. It seems possible that mothers who were less positive during the interaction are temperamentally shy or nervous and thus are

habitually cooler within interactions than other mothers. Their children may, therefore, discount their mothers' lack of warmth and see it as unreflective of racial bias. The use of a within-subjects comparison of an interaction with a White (e.g., same-race) confederate would test this notion. It is also possible that children did not attend to their mothers' nonverbal behavior. Indeed, informal reviews of the videotapes indicated surprising few instances of social referencing. Additionally, young children may be unable to generalize mothers' behaviors with an outgroup member to the outgroup as a whole.

### **Predictors of Children's Behavior in Cross-Race Interaction**

Interestingly, mothers' self-reported racial socialization behaviors, racial beliefs, and intergroup contact did not predict children's nonverbal behavior in the cross-race interaction. However, children's social distance ratings (but not trait ratings) predicted their nonverbal behavior in the interaction with the African American confederate. Again, it is important to note that these measures were all self-report and subject to social desirability. Specifically, with regard to intergroup contact, it is likely that mothers overestimated or exaggerated the percentage of non-European Americans within each setting. Given that this measure was presented to mothers after they received full consent and were fully aware of the purpose of the study, it may be these Asian American, European American, and Latino mothers had concerns about appearing prejudiced toward African Americans and being judged negatively by the experimenter and, thus, exaggerated the level of diversity in their lives. More objective measures of intergroup contact (e.g., census data) and racial prejudice concerns (e.g., physiological responses) may be more accurate predictors of children's nonverbal behavior.

## Summary

As with any study, there are several limitations that should be noted. First, the sample is relatively small and homogenous with regard to social economic class. We studied racial socialization exclusively among mothers, specifically those that are well-educated and middle-to upper-middle class. The sampling of this population was intentional. We intended to examine the racial socialization practices among the highly educated, middle-class mother who have reported that they are committed to racial equality (see Smelser, Wilson, & Mithcell, 2001). Given this sampling, our findings should only be interpreted cautiously. The targeting of educated, upper-middle class mothers limited the amount of variation within our data. Future research should target mothers from a broader range of socioeconomic backgrounds and test for variation in maternal views, ideology, and socialization goals across class and education levels

In addition, some of the measures used here were new and created expressly for use in this study. For example, the authors created novel scales for colorblind ideology, self-reported behaviors, and nonverbal coding. It is possible that these measures failed to tap the constructs that we sought to assess.

Finally, some caution should be used when interpreting the results of the hierarchical multiple regression models. Specifically, some models had VIF scores above what is deemed acceptable, which suggests multicollinearity issues among our predictors. However, the predictive power of the models, as a whole, are not affected by multicollinearity. Rather, when multicollinearity occurs, it is only the predictive power of individual predictors that is affected.

Despite these limitations, the current study makes important contributions to our understanding of the role of parents in shaping their young children's racial attitudes. Results replicate prior work indicating that mothers' and children's attitudes toward African Americans are unrelated and further, that mothers and their children are unable to predict the racial attitudes of each other. In addition, children's racial attitudes were unrelated to the majority of the maternal measures of racial attitudes and behavior assessed here. Although mothers' and children's social distance ratings predict their nonverbal behavior with cross-race others, mothers' nonverbal behavior did not, as expected, predict children's racial attitudes. Future research should continue to explore verbal and nonverbal behaviors that parents may exhibit in every day contexts that have the potential to shape children's attitudes, as well as non-parental sources of children's racial attitudes.

Table 1

Relations Among Measures of Mothers' and Children's Nonverbal Behavior in the Lab

	1	2	3	4	5	6	7	8	9
1. Mother Comfort	1	.49**	.43**	.59**	.17	.18	.24	.29	-.05
2. Mother Friendliness		1	.79**	.87**	.61**	.35*	.28	.60**	.13
3. Mother Openness to Converse			1	.80**	.45**	.35*	.35*	.53**	.21
4. Mother Non-Prejudice				1	.56**	.32*	.39*	.59*	.01
5. Child Friendly					1	.63**	.69**	.75**	.20
6. Child Ease						1	.56**	.71**	.20
7. Child Openness to Converse							1	.61**	.25
8. Child Non-Prejudice								1	.24
9. Child Touch (Reversed)									1
Mean	3.87	2.90	3.22	3.44	2.69	3.86	3.61	4.01	3.71
Std. Deviation	.91	1.19	1.11	.94	1.18	.99	.84	.98	1.61

*Note.* \* Significance at the .05 level (2-tailed)

\*\* Significance at the .01 level (2-tailed)

Table 2

Relations Among Measures of Mothers' Interracial Contact

	1.	2.	3.	4.	5.	6.	7.
1. Diverse Friends	1	.30	.52**	.39*	.79**	.80**	.50**
2. Diverse High School		1	.30	.15	.15	.23	.18
3. Diverse College			1	.39	.43**	.49*	.31
4. Diverse Work				1	.50**	.70**	.40*
5. Diverse Activities					1	.82**	.70**
6. Diverse Religious						1	.50*
7. Diverse Neighborhood							1

*Note.* \* Significance at the .05 level (2-tailed)

\*\* Significance at the .01 level (2-tailed)



Table 3

Relations Among Measures of Child's Interracial Contact

	1.	2.	3.	4.	5.
1. Diverse Friends	1	.55**	.51*	.39*	-.07
2. Diverse Activities		1	.51*	.71**	.06
3. Diverse Religious			1	.42	.05
4. Diverse Neighborhood				1	-.00
5. Diverse Pre-K					1
<i>Mean (average Whiteness)</i>	75.69%	75.69%	70.5%	63.74%	61.56%
<i>Standard Deviation</i>	19.56	16.6	29.81	25.3	24.95
<i>Mean (average Black)</i>	6.46%	9.11%	6.43%	9.39%	9.21%
<i>Standard Deviation</i>	5.28	5.2	7.53	11.44	7.83

*Note.* \* Significance at the .05 level (2-tailed)

\*\* Significance at the .01 level (2-tailed)

Table 4

Means, Standard Deviations, Ranges, and Relations Among Measures for Mothers' Racial Attitudes

	1.	2.	3.	4.	5.	6.	7.	8.
1. Trait Bias	1	-.19	-.22	-.03	.04	.06	.09	-.09
2. Social Distance		1	-.35*	-.22	-.04	.02	-.23	-.003
3. Prejudice Theories			1	.30*	.23	-.05	-.06	.35*
4. Prejudice Concerns				1	.78**	-.03	.08	.34*
5. Concerns about Child Behavior					1	-.19	.04	.25
6. Colorblind Ideology						1	-.22	.20
7. Valuing of Diversity							1	-.04
8. Fear of discussing race								1
Mean	-.03	4.5	2.89	2.71	1.19	3.18	3.18	3.25
Standard Deviation	.15	.66	.816	.95	.37	.69	1.22	.79
Range	-.6 -	3 - 5	1-4.33	1–	1–	1–	1 – 5	1–
	.20			4.67	4.67	5.67		6.60

*Note.* \* Significance at the .05 level (2-tailed)

\*\* Significance at the .01 level (2-tailed)

Table 5

Hierarchical Regression Model Using Maternal Racial Socialization to Predict Child's Trait Ratings

Variable	R <sup>2</sup>	b	$\beta$	<i>p</i>	VIF
Step 1	.17				
Child's Age		.41	.41	.006**	1
Step 2	.17				
Child's age		.40	.41	.015*	1.23
Mothers' Education		-.008	-.009	.95	1.23
Step 3	.211				
Child's Age		.44	.44	.01**	1.28
Mothers' Education		.04	.04	.78	1.34
Egalitarianism		.004	.005	.98	1.71
History of Other Groups		-.12	-.15	.39	1.36
Discrimination Against Other Groups		-.11	-.09	.71	2.81
Preparation for Bias		.18	.23	.36	2.75

Note: \*Significance at the .05 level (2-tailed)

\*\* Significance at the .01 level (2-tailed)

Table 6

Hierarchical Regression Model Using Maternal Racial Socialization to Predict Child's Social Distance Ratings

Variable	R <sup>2</sup>	b	$\beta$	<i>p</i>	VIF
Step 1	.03			.24	
Child's Age		.28	.18	.24	1
Step 2	.03			.48	
Child's age		.32	.21	.24	1.23
Mothers' Education		.09	.05	.74	1.23
Step 3	.13			.52	
Child's Age		.31	.20	.26	1.28
Mothers' Education		.03	.02	.90	1.36
Egalitarianism		.14	.11	.60	1.79
History of Other Groups		.32	.26	.17	1.42
Discrimination Against Other Groups		.16	.09	.74	2.91
Preparation for Bias		-.21	-.17	.51	2.79

Note: \*Significance at the .05 level (2-tailed)

\*\* Significance at the .01 level (2-tailed)

Table 7

Hierarchical Regression Model Using Maternal Intergroup Contact to Predict Child's Trait Ratings

Variable	R <sup>2</sup>	b	$\beta$	<i>p</i>	VIF
Step 1	.20				
Child's Age		.63	.45	.09	1
Step 2	.22				
Child's age		.76	.55	.09	1.41
Mothers' Education		.35	.18	.55	1.41
Step 3	.24				
Child's Age		.81	.58	.14	1.57
Mothers' Education		.50	.26	.54	1.99
Diversity High School		.003	.06	.86	1.84
Diversity Workplace		-.002	-.03	.94	3.30
Diversity Composite		.005	.11	.84	3.94

Note: \*Significance at the .05 level (2-tailed)

\*\* Significance at the .01 level (2-tailed)

Table 8

Hierarchical Regression Model Using Maternal Intergroup Contact to Predict Child's Social Distance Ratings

Variable	R <sup>2</sup>	b	$\beta$	<i>p</i>	VIF
Step 1	.05				
Child's Age		.37	.24	.36	1
Step 2	.11				
Child's age		.56	.36	.23	1.28
Mothers' Education		.54	.26	.38	1.28
Step 3	.13				
Child's Age		.54	.35	.33	1.39
Mothers' Education		.59	.29	.47	1.82
Diversity High School		-.008	-.16	.67	1.65
Diversity Workplace		.005	.11	.83	3.22
Diversity Composite		.003	.05	.92	4.32

Note: \*Significance at the .05 level (2-tailed)

\*\* Significance at the .01 level (2-tailed)

Table 9

Hierarchical Regression Model Using Maternal Racial Beliefs to Predict Child's Trait Ratings

Variable	R <sup>2</sup>	b	$\beta$	<i>p</i>	VIF
Step 1	.17				
Child's Age		.41	.42	.007**	1
Step 2	.17				
Child's age		.41	.41	.01**	1.25
Mothers' Education		-.004	-.004	.97	1.25
Step 3	.29				
Child's Age		.38	.38	.03*	1.29
Mothers' Education		.04	.04	.79	1.52
Valuing of Diversity		.13	.25	.12	1.12
Prejudice Theories		.22	.26	.11	1.51
Prejudice Concerns		-.01	-.01	.94	2.72
Prejudice Concerns about Child		-.01	-.02	.92	2.61
Colorblind Ideology		.17	.17	.32	1.38
Mothers' Fear of Discussing Race		-.04	-.05	.77	1.34

Note: \*Significance at the .05 level (2-tailed)

\*\* Significance at the .01 level (2-tailed)

Table 10

Hierarchical Regression Model Using Maternal Racial Beliefs to Predict Child's Social Distance Ratings

Variable	R <sup>2</sup>	b	$\beta$	p	VIF
Step 1	.17				
Child's Age		.25	.17	.28	1
Step 2	.17				
Child's age		.27	.18	.31	1.23
Mothers' Education		.03	.02	.89	1.23
Step 3	.15				
Child's Age		.28	.18	.31	1.28
Mothers' Education		-.004	-.003	.98	1.61
Valuing of Diversity		-.07	-.08	.61	1.15
Prejudice Theories		-.16	-.12	.51	1.28
Prejudice Concerns		-.21	-.19	.48	2.72
Prejudice Concerns about Child		-.08	-.07	.78	2.57
Colorblind Ideology		.11	.07	.70	1.54
Mothers' Fear of Discussing Race		-.19	-.72	.47	1.36

*Note:* \*Significance at the .05 level (2-tailed)

\*\* Significance at the .01 level (2-tailed)



Table 11

Regression Estimates of Effects for Mothers' Racial Beliefs on Perceived Experience of Negative Behaviors

	Nervousness		Coldness			Indifference	
	$\beta$	$p$	$\beta$	$p$	.	$\beta$	$p$
1. Valuing of Diversity	-.02	.60	.03	.52		-.23	.13
2. Prejudice Theories	-.002	.98	.13	.16		-.05	.83
3. Prejudice Concerns	.16	.15	.15	.20		.50	.12
4. Prejudice Concerns	-.09	.41	-.20	.11		-.48	.14
about Child							
5. Colorblind Ideology	.002	.98	-.11	.30		.04	.87
6. Mothers' Fear of	.08	.34	.13	.17		-.54	.04
Discussing Race							

*Note.* \* Significance at the .05 level (2-tailed)

\*\* Significance at the .01 level (2-tailed)

Table 12

Regression Estimates of Effects for Mothers' Racial Beliefs on Perceived Experience of Positive Behaviors

	Interest	
	$\beta$	$p$
1. Valuing of Diversity	-.01	.87
2. Prejudice Theories	-.13	.44
3. Prejudice Concerns	.25	.29
4. Prejudice Concerns	-.17	.25
about Child		
5. Colorblind Ideology	-.12	.54
6. Mothers' Fear of	.17	.36
Discussing Race		

*Note.* \* Significance at the .05 level (2-tailed)  
 \*\* Significance at the .01 level (2-tailed)

Table 13

Regression Estimates of Effects for Mothers' Racial Beliefs on Perceived Expression of Negative Behaviors

	Nervousness		Coldness			Indifference	
	$\beta$	$p$	$\beta$	$p$	.	$\beta$	$p$
1. Valuing of Diversity	-.08	.29	.09	.17		.20	.09
2. Prejudice Theories	.15	.21	.11	.28		.13	.48
3. Prejudice Concerns	-.07	.68	-.14	.31		.03	.90
4. Prejudice Concerns	-.05	.73	.09	.51		-.29	.26
about Child							
5. Colorblind Ideology	.002	.98	.008	.94		.03	.86
6. Mothers' Fear of	-.12	.36	-.16	.13		-.29	.16
Discussing Race							

*Note.* \* Significance at the .05 level (2-tailed)

\*\* Significance at the .01 level (2-tailed)

Table 14

Regression Estimates of Effects for Mothers' Racial Beliefs on Perceived Expression of Positive Behaviors

	Interest	
	$\beta$	$p$
1. Valuing of Diversity	-.13	.16
2. Prejudice Theories	-.05	.74
3. Prejudice Concerns	-.23	.27
4. Prejudice Concerns	.31	.13
about Child		
5. Colorblind Ideology	-.08	.66
6. Mothers' Fear of	.36	.03
Discussing Race		

*Note.* \* Significance at the .05 level (2-tailed)  
 \*\* Significance at the .01 level (2-tailed)

Appendix A  
**Email Template – First Contact**

Subject: Seeking Child Participants for Study of Children's Learning about Social Groups

DEPARTMENT OF PSYCHOLOGY  
THE UNIVERSITY OF TEXAS AT AUSTIN

Children's Research Laboratory • 108 E. Dean Keeton • Suite 1.326 • Austin,  
Texas 78712 • (512) 471-6261

Dear Parent:

The Children's Research Lab (CRL), a component of the Psychology Department at the University of Texas, conducts research on child development. This letter is to inform you of an opportunity for your child to participate in a research project aimed at investigating how mothers use literature shape their children's social knowledge and attitudes.

Participation involves one hour-long appointment, during which you and your child will answer questions regarding storybooks and social information. Overall, the session will last less than one hour, and of course you may stop participation at any time and for any reason. We also have free parking right in front of the building and free babysitting available if you have other children.

We have found that most parents and children really enjoy participating in our research and find the experience to be interesting and informative. If this sounds like something you might be interested in, or if you have any questions, please reply to this email <UTstoryendings@gmail.com> or call the lab phone at 512-475-7882.

Thank you for your time, and we look forward to hearing from you soon!

John Rohrbach  
Doctoral Student

## Calling Script – First Contact

For parents to whom we have NOT sent an email:

***If you reach an answering machine, say:***

“Hi, this is [YOUR name] from the Children’s Research Lab at the University of Texas. I am calling to invite you and your child [CHILD’s name] to participate in one of our studies. This would require a brief one-time visit to our lab. The project concerns how mothers use literature to teach children about social information and, during your visit, you and your child would complete several surveys concerning your attitudes about social information. If you are interested in participating or have any questions, please call us back at 475-7882. Also, if you are not interested, you can call us back at 475-7882, and we will be happy to remove your name from our database.”

***If you reach a person, say:***

“Hi, this is [YOUR name] from the University of Texas. Can I speak to the parent of [CHILD’s name]?”

“I’m calling from the Children’s Research Lab to invite you and [CHILD’s name] to participate in our study. Our current project investigates how mothers’ use literature use literature to teach children’s views about social information. Would you like more information?”

***If they can’t come now/don’t have time,*** ask if you may have their email for future studies.

***If yes to sending an email with more information,*** get their current email address.

***If they want a description now, say:***

“If you decide to participate, we will schedule a 1-hour appointment for you and your child at the Children’s Research Lab on campus. You and your child will complete surveys about your attitudes about social information. Overall, the session will last less than 1 hour, and of course you may stop participation at any time and for any reason. And, we have free parking right in front of the lab and free babysitting available if you have other children.

“Does this sound like something you might want to do?”

***If interested, say:***

“We’re extremely flexible with scheduling. We have times available between 9am and 6pm, Monday through Sunday. Is there a time or day that generally works best for you?”

***Double-check the schedule to make sure there isn’t another appointment at the same time. If no one is scheduled for a time that works, feel free to sign them up.***

***If not interested, ask:*** “Would you like to remain in our database for future studies?”

***If they would, circle “keep” on the Subject Report Form (SRF) and put it in the “keep” folder. If not, circle “delete” on the SRF and put it in the “delete” folder.***

***To end the call, say:*** Thank you for supporting our current research. We will see you soon!

## **Rohrbach CRL Calling Script 2 – First Contact**

For parents to whom we HAVE sent an email:

***If you reach an answering machine, say:***

“Hi, this is [YOUR name] from the Children’s Research Lab at the University of Texas. I am calling to invite you and your son/daughter [CHILD’s name] to participate in our research study. We sent an email about the study, and I’m calling to follow up. Your participation would require a brief one-time visit to our lab, during which, you and your child would answer some questions about your attitudes about various social information. If you are interested in participating or have any questions, please call us back at 475-7882. Also, if you are not interested, you can call us back at 475-7882, and we will be happy to remove your name from our database.”

***If you reach a person, say:***

“Hi, this is [YOUR name] from the psychology department at the University of Texas. May I speak to the parent of [CHILD’s name]?”

“I’m calling from the Children’s Research Lab to invite you and [CHILD’s name] to participate in our research study. We recently sent an email to you about the study. Did you get the email?”

***If they can’t come now/don’t have time,*** ask if you may keep their email on file for future studies.

***If they want more information, say:***

“Great! Our current project investigates children’s views of social groups. Are you interested in hearing more about the study or signing up for an appointment?”

“If you decide to participate, we will schedule a 1-hour appointment for you and your child at the Children’s Research Lab. You and your child will complete surveys about your attitudes about social information. Overall, the session will last less than 1 hour, and of course you may stop participation at any time and for any reason. And, we have free parking right in front of the lab and free babysitting available if you have other children.

“Would you like to schedule your appointment now?”

***If ready to schedule, say:***



“We’re extremely flexible with scheduling. We have times available between 9am and 6pm, Monday through Sunday. Is there a time or day that generally works best for you?”

***Double-check the schedule to make sure there isn’t another appointment at the same time. If no one is scheduled for a time that works, feel free to sign them up.***

***If not interested, ask:*** “Would you like to remain in our database for future studies?”

***If they would, circle “keep” on the Subject Report Form (SRF) and put it in the “keep” folder. If not, circle “delete” on the SRF and put it in the “delete” folder***

***To end the call, say:*** Thank you for supporting our current research. We will see you soon!

## Appendix B

### Children's Measures

#### *Sorting Task*

"Here is a group of 16 pictures of different people. People have some ways they are alike or similar and some ways they are different. Looking at these pictures, do you see a way to divide the pictures into **two** groups that include people who are alike or similar in some way?"

"Great. Can you think of another way to make groups that include people who are similar?"

#### *Black/White Evaluative Trait Scale*

If the child does not spontaneously sort on the basis of race, divide the photographs into two groups based on race/ethnicity. Then say, "There are two different groups here. How are the groups different? Can you tell?" "Right. The two groups have skin that is different colors. What is this group called?" "Okay. What about this second group?"

**\*\*If the child does not know names for the group, you can ask them if they think that the names White and Black would be good.**

"I'm going to ask you what you think about different groups of people. I have asked many children these questions; some answer one way and some answer another way. Every answer is fine as long as it is your true feeling. Your answers are private. The

questions I will ask you are not difficult but if you feel uncomfortable about answering one of them or don't understand, let me know. You can use this picture to help you answer the questions. Remember, there are no right or wrong answers to these questions. I just want to know what you think."

*(Set out picture of people with the words "Almost all," "Most," "Some," "A few" and "Almost none" written on them in front of the child.) "Do you see these pictures? Let's practice using them. If I asked you how many babies wear diapers, which picture would you use to answer? Good. And if I asked you how many people wear glasses, what then? Good. Let's start." (If child responds to warm up questions in confusing way, try other similar questions unrelated to race until you've determined either that they're comfortable using the response options, or that the child doesn't understand how to use them. In the latter case thank the child kindly and end the protocol.)*

Read list of traits through one time with either Black or White people as the target race. Then go through the list a second time, changing target race. Make note of target race order on the response sheet.

"All right, now I'm going to ask you questions about what Black/White people are like, so think about what Black/White people are like for these questions. Ready? Okay."

1. How many Black/White people are **honest** and always tell the truth?
2. How many Black/White people are **happy** and smile a lot?
3. How many Black/White people are **bad** and break the rules?
4. How many Black/White people are **nice** and do things that make other people happy?
5. How many Black/White people are **awful** and never do good things?
6. How many Black/White people are **cruel** and do very mean things to other people on purpose?
7. How many Black/White people are **pretty** and have nice-looking faces and hair?
8. How many Black/White people are **selfish** and care too much about getting what they want?
9. How many Black/White people are **generous** and give things to people who need their help?
10. How many Black/White people are **dumb** and don't learn things very quickly?

Continue now with the other target racial group; repeat all of the questions, using the opposite racial group as the referent.

"You're doing great. Now we have a few more questions using a different picture." (Take out the picture with the thumbs. "Let's practice using this picture. What would you point to if I asked how happy you would feel if I gave you an ice cream cone? Great. What if I asked how happy you would be if I said you would have to go to bed tonight without having any dinner?"

### How happy would you be to have a Black person...

1. As my teacher	Very happy	A little happy	Just so-so	A little unhappy	Very unhappy
2. As my friend	Very happy	A little happy	Just so-so	A little unhappy	Very unhappy
3. As my next door neighbor	Very happy	A little happy	Just so-so	A little unhappy	Very unhappy
4. As my doctor	Very happy	A little happy	Just so-so	A little unhappy	Very unhappy
5. As my babysitter	Very happy	A little happy	Just so-so	A little unhappy	Very unhappy

"Now, I want you to guess how your mom would answer some of the questions you've answered. You might not know for sure, so you might have to make your best guess."

Read list of traits through one time with either African American or White people as the target race. Then go through the list a second time, changing target race.

"All right, now I'm going to ask you questions about what Black/White people are like, so think about what your mom would say. Ready? Okay."

1. How many Black/White people are **honest** and always tell the truth?
2. How many Black/White people are **happy** and smile a lot?
3. How many Black/White people are **bad** and break the rules?
4. How many Black/White people are **nice** and do things that make other people happy?
5. How many Black/White people are **awful** and never do good things?

6. How many Black/White people are **cruel** and do very mean things to other people on purpose?
7. How many Black/White people are **pretty** and have nice-looking faces and hair?
8. How many Black/White people are **selfish** and care too much about getting what they want?
9. How many Black/White people are **generous** and give things to people who need their help?
10. How many Black/White people are **dumb** and don't learn things very quickly?

Continue now with the other target racial group; repeat all of the questions, using the opposite racial group as the referent.

## Appendix C

### Black-White Evaluative Trait Scale for Use with Moms and Children

#### Black Evaluative Traits

1. Honest	Almost all	A lot	Some	Not many	Hardly any or none
2. Happy	Almost all	A lot	Some	Not many	Hardly any or none
3. Bad	Almost all	A lot	Some	Not many	Hardly any or none
4. Nice	Almost all	A lot	Some	Not many	Hardly any or none
5. Awful	Almost all	A lot	Some	Not many	Hardly any or none
6. Cruel	Almost all	A lot	Some	Not many	Hardly any or none
7. Pretty	Almost all	A lot	Some	Not many	Hardly any or none
8. Selfish	Almost all	A lot	Some	Not many	Hardly any or none
9. Generous	Almost all	A lot	Some	Not many	Hardly any or none
10. Dumb	Almost all	A lot	Some	Not many	Hardly any or none

#### White Evaluative Traits

1. Honest	Almost all	A lot	Some	Not many	Hardly any or none
2. Happy	Almost all	A lot	Some	Not many	Hardly any or none
3. Bad	Almost all	A lot	Some	Not many	Hardly any or none
4. Nice	Almost all	A lot	Some	Not many	Hardly any or none
5. Awful	Almost all	A lot	Some	Not many	Hardly any or none
6. Cruel	Almost all	A lot	Some	Not many	Hardly any or none
7. Pretty	Almost all	A lot	Some	Not many	Hardly any or none
8. Selfish	Almost all	A lot	Some	Not many	Hardly any or none
9. Generous	Almost all	A lot	Some	Not many	Hardly any or none
10. Dumb	Almost all	A lot	Some	Not many	Hardly any or none

## Guess Your Child's (Mom's) Answers

**What do you think your child [mom] said when asked how many White or Caucasian people are...**

1. Honest	Almost all	A lot	Some	Not many	Hardly any or none
2. Happy	Almost all	A lot	Some	Not many	Hardly any or none
3. Bad	Almost all	A lot	Some	Not many	Hardly any or none
4. Nice	Almost all	A lot	Some	Not many	Hardly any or none
5. Awful	Almost all	A lot	Some	Not many	Hardly any or none
6. Cruel	Almost all	A lot	Some	Not many	Hardly any or none
7. Pretty	Almost all	A lot	Some	Not many	Hardly any or none
8. Selfish	Almost all	A lot	Some	Not many	Hardly any or none
9. Generous	Almost all	A lot	Some	Not many	Hardly any or none
10. Dumb	Almost all	A lot	Some	Not many	Hardly any or none

**What do you think your child [mom] said when asked how many Black or African American people are...**

1. Honest	Almost all	A lot	Some	Not many	Hardly any or none
2. Happy	Almost all	A lot	Some	Not many	Hardly any or none
3. Bad	Almost all	A lot	Some	Not many	Hardly any or none
4. Nice	Almost all	A lot	Some	Not many	Hardly any or none
5. Awful	Almost all	A lot	Some	Not many	Hardly any or none
6. Cruel	Almost all	A lot	Some	Not many	Hardly any or none
7. Pretty	Almost all	A lot	Some	Not many	Hardly any or none
8. Selfish	Almost all	A lot	Some	Not many	Hardly any or none
9. Generous	Almost all	A lot	Some	Not many	Hardly any or none
10. Dumb	Almost all	A lot	Some	Not many	Hardly any or none



## Appendix D

### Social Distance Scale for Use with Moms and Children

**How happy would you be to have a Black person...**

1. As my teacher	Very happy	A little happy	Just so-so	A little unhappy	Very unhappy
2. As my friend	Very happy	A little happy	Just so-so	A little unhappy	Very unhappy
3. As my next door neighbor	Very happy	A little happy	Just so-so	A little unhappy	Very unhappy
4. As my doctor	Very happy	A little happy	Just so-so	A little unhappy	Very unhappy
5. As my babysitter	Very happy	A little happy	Just so-so	A little unhappy	Very unhappy

### Guess Your Child's (Mom's) Answers

**What do you think your child [mom] said when asked if he/she would be happy to have a Black or African American person...**

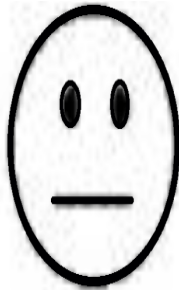
1. As my teacher	Very happy	A little happy	Just so-so	A little unhappy	Very unhappy
2. As my friend	Very happy	A little happy	Just so-so	A little unhappy	Very unhappy
3. As my next door neighbor	Very happy	A little happy	Just so-so	A little unhappy	Very unhappy
4. As my doctor	Very happy	A little happy	Just so-so	A little unhappy	Very unhappy
5. As my babysitter	Very happy	A little happy	Just so-so	A little unhappy	Very unhappy



**Really  
Happy**



**A Little  
Happy**



**Just so-so**



**A Little  
Unhappy**



**Really  
Unhappy**

Almost all

A lot

Some

Not many

Hardly or none



## Appendix E

### Demographics

**Please fill the following information to the best of your ability.**

1. Your Current Age: \_\_\_\_\_

2. Are you (please circle one):

Married	Separated	Divorced	Single	Other (please describe):
---------	-----------	----------	--------	--------------------------------

3. What is your ethnic background? Please circle the best description below.

Asian, Asian American	Black, African American	Latino, Hispanic	White, Euro. American	American Indian, Native American	Mixed or Other (please describe)
-----------------------------	-------------------------------	---------------------	-----------------------------	---	---

4. What is your child's father's ethnic background? Please circle the best description below.

Asian, Asian American	Black, African American	Latino, Hispanic	White, Euro. American	American Indian, Native American	Mixed or Other (please describe)
-----------------------------	-------------------------------	---------------------	-----------------------------	---	---

4. What is your child's ethnic background? Please circle the best description.

Asian, Asian American	Black, African American	Latino, Hispanic	White, Euro. American	American Indian, Native American	Mixed or Other (please describe)
-----------------------------	-------------------------------	---------------------	-----------------------------	---	---

7. Where do you live?

A house you own	A hose you rent	An apartment or condo you own	An apartment or condo you rent	Other (please describe):
-----------------	-----------------	-------------------------------	--------------------------------	--------------------------

8. Does your child attend preschool or elementary school?      Preschool    Elementary

What is the name of the school? \_\_\_\_\_

How many hours a week does your child spend at preschool/school? \_\_\_\_\_

Now, please think about the specific racial/ethnic background of the children at the preschool. Approximately what percentage of the children at the preschool are White, Black or African American, Latino or Hispanic, and Asian? Please enter approximate percentages below. When added together, please make sure all of the numbers total 100.

The children at my child's preschool are:

\_\_\_\_\_ % White

\_\_\_\_\_ % Black or African American

\_\_\_\_\_ % Latino or Hispanic

\_\_\_\_\_ % Asian

\_\_\_\_\_ % Other: \_\_\_\_\_

9. How much schooling have you and your spouse/partner received?

	8 yrs or less	9-11 yrs	12 yrs, finished high school	13-15 yrs, some college	16-17 yrs, college degree	18 or more yrs, graduate school
You						
Spouse/Partner						

10. To what extent do you believe you are conservative or liberal?

1                      2                      3                      4                      5                      6

7  
Very  
Very  
Conservative  
Liberal

## Appendix F

### Self-Reported Experience and Expression

Please rate the extent to which you *experienced* each emotion in the interaction with the Black person in the room.

	Not at all	A little	Somewhat	Much	A lot
Nervousness					
Coldness					
Indifference					
Warmth					
Affiliation					
Interest					

Please rate the extent to which you *expressed* each emotion in the interaction with the Black person in the room.

	Not at all	A little	Somewhat	Much	A lot
Nervousness					
Coldness					
Indifference					
Warmth					
Affiliation					
Interest					

## Appendix G

### Racial Socialization

**Directions:** For each of the items below, please answer two related questions. Please circle one response under the gray columns and one response under the white columns.

**The gray Columns:** The first question is how often you explicitly or directly tell your child *these* things *now*. For each item, please circle one of the response options in the gray columns. So, for example, for item 1, please circle one number that indicates how often you tell your child that people are equal, regardless of their race or ethnic background.

I explicitly or directly tell my child...	About how often do you tell your child this?				
	Never	Rarely	Some-times	Often	Very Often
1. People are equal, regardless of their race or ethnic background	1	2	3	4	5
2. About the discrimination people from <i>other</i> racial or ethnic groups have experienced in the past.	1	2	3	4	5
3. About important people in the history of <i>other</i> racial or ethnic groups.	1	2	3	4	5
4. To read books about the history or traditions of different ethnic and racial groups, other than our own.	1	2	3	4	5
5. About the possibility that some people might treat him/her badly or unfairly because of our race or ethnicity.	1	2	3	4	5
6. Other racial or ethnic groups are just as trustworthy as people of our own ethnic or racial group.	1	2	3	4	5
7. People of all races have an equal chance in life.	1	2	3	4	5
8. He/she should try to make friends with people of all races and ethnic backgrounds.	1	2	3	4	5
9. About discrimination or prejudice against <i>our</i> ethnic or racial group.	1	2	3	4	5
10. About discrimination or prejudice against <i>other</i> ethnic or racial group.	1	2	3	4	5
11. It is important to appreciate people of all racial and ethnic backgrounds.	1	2	3	4	5
12. Something unfair that he/she witnessed was due to racial or ethnic discrimination against <i>another</i> ethnic or racial group.	1	2	3	4	5
13. In the past people from <i>other</i> racial or ethnic groups were discriminated against because of their race or ethnicity.	1	2	3	4	5
14. It is best to have friends who are the same race or ethnic group we are.	1	2	3	4	5



I explicitly or directly tell my child...	About how often do you tell your child this?				
	Never	Rarely	Some-times	Often	Very Often
15. The importance of getting along with people of all races and ethnicities	1	2	3	4	5
16. Something he/she saw showed poor treatment of different ethnic or racial groups, other than our own.	1	2	3	4	5
17. American society is fair to all races and ethnicities.	1	2	3	4	5
18. People from <i>other</i> racial or ethnic groups are sometimes still discriminated against because of their race or ethnicity.	1	2	3	4	5
19. To learn about the history or traditions of <i>other</i> racial or ethnic groups.	1	2	3	4	5
20. People of our race or ethnic group have better opportunities than people of other racial or ethnic groups.	1	2	3	4	5
21. People of different races and ethnicities have different values and beliefs.	1	2	3	4	5
22. American society is not always fair to all races and ethnicities.	1	2	3	4	5
23. It is a bad idea to marry someone who is of a different ethnic background or race than ours.	1	2	3	4	5
24. Sometimes people are treated badly just because of their race or ethnicity.	1	2	3	4	5
25. About the history of <i>other</i> racial or ethnic groups in our country.	1	2	3	4	5

## Appendix H

### Mother and Child Intergroup Contact

**Please answer the following questions to the best of your ability. If you do not know specific numbers, please provide your best estimate.**

1. Please think about the specific racial/ethnic background of this neighborhood. Please enter approximate percentages below. When added together, please make sure the numbers total 100.

My neighborhood is:

- % White
- % Black or African American
- % Latino or Hispanic
- % Asian

2. Please think about the specific racial/ethnic background of these religious services. Please enter approximate percentages below. When added together, please make sure the numbers total 100. If you do not attend religious services, please leave blank.

My child's neighborhood is:

- % White
- % Black or African American
- % Latino or Hispanic
- % Asian

3. Please think about the specific racial/ethnic background of these extracurricular activities. Please enter approximate percentages below. When added together, please make sure the numbers total 100.

My activities are:

- % White
- % Black or African American
- % Latino or Hispanic
- % Asian

4. Please think about the specific racial/ethnic background of your workplace. Please enter approximate percentages below.

My workplace is:

- % White
- % Black or African American
- % Latino or Hispanic

\_\_\_ % Asian

5. Please think about the specific racial/ethnic background of your high school. Please enter approximate percentages below.

My workplace is:

\_\_\_ % White

\_\_\_ % Black or African American

\_\_\_ % Latino or Hispanic

\_\_\_ % Asian

6. Please think about the specific racial/ethnic background of your college. Please enter approximate percentages below.

My workplace is:

\_\_\_ % White

\_\_\_ % Black or African American

\_\_\_ % Latino or Hispanic

\_\_\_ % Asian

7. Please think about the specific racial/ethnic background of your friends. Please enter approximate percentages below.

My friends are:

\_\_\_ % White

\_\_\_ % Black or African American

\_\_\_ % Latino or Hispanic

\_\_\_ % Asian

**Now, we would like you to answer the following questions with your child in mind. Please answer the following questions to the best of your ability. If you do not know specific numbers, please provide your best estimate.**

1. Please think about the specific racial/ethnic background of this neighborhood. Please enter approximate percentages below. When added together, please make sure the numbers total 100.

My child's neighborhood is:

- \_\_\_ % White
- \_\_\_ % Black or African American
- \_\_\_ % Latino or Hispanic
- \_\_\_ % Asian

2. Please think about the specific racial/ethnic background of these religious services. Please enter approximate percentages below. When added together, please make sure the numbers total 100. If your child does not attend religious services, please leave blank.

My child's religious services  
are:

- \_\_\_ % White
- \_\_\_ % Black or African American
- \_\_\_ % Latino or Hispanic
- \_\_\_ % Asian

3. Please think about the specific racial/ethnic background of these extracurricular activities. Please enter approximate percentages below. When added together, please make sure the numbers total 100.

My child's extracurricular activities are:

- \_\_\_ % White
- \_\_\_ % Black or African American
- \_\_\_ % Latino or Hispanic
- \_\_\_ % Asian

4. Please think about the specific racial/ethnic background of your child's friends. Please enter approximate percentages below.

My child's friends are:

- \_\_\_ % White
- \_\_\_ % Black or African American
- \_\_\_ % Latino or Hispanic
- \_\_\_ % Asian

## Appendix I

### Valuing of Diversity

#### **1. When selecting a school for my child,**

- A) Ethnic diversity is much less important to me than average school achievement levels.
- B) Ethnic diversity is somewhat less important to me than average school achievement levels.
- C) Ethnic diversity is a little less important to me than average school achievement levels.
- D) Ethnic diversity is a little more important to me than average school achievement levels.
- E) Ethnic diversity is somewhat more important to me than average school achievement levels.
- F) Ethnic diversity is much more important to me than average school achievement levels.

#### **2. When selecting a neighborhood in which to live,**

- A) Ethnic diversity is much less important to me than property crime statistics.
- B) Ethnic diversity is somewhat less important to me property crime statistics.
- C) Ethnic diversity is a little less important to me than property crime statistics.
- D) Ethnic diversity is a little more important to me than property crime statistics.
- E) Ethnic diversity is somewhat more important to me property crime statistics.
- F) Ethnic diversity is much more important to me than property crime statistics.

#### **3. When selecting a community center to join,**

- A) Ethnic diversity is much less important to me than driving distance to the center.
- B) Ethnic diversity is somewhat less important to me than driving distance to the center.
- C) Ethnic diversity is a little less important to me than driving distance to the center.
- D) Ethnic diversity is a little more important to me than driving distance to the center.
- E) Ethnic diversity is somewhat more important to me driving distance to the center.
- F) Ethnic diversity is much more important to me than driving distance to the center.

#### **4. When selecting a religious organization to join,**

- A) Ethnic diversity is much less important to me than the quality of religious service.

- B) Ethnic diversity is somewhat less important to me than the quality of religious service.
- C) Ethnic diversity is a little less important to me than the quality of religious service.
- D) Ethnic diversity is a little more important to me than the quality of religious service.
- E) Ethnic diversity is somewhat more important to me than quality of religious service.
- F) Ethnic diversity is much more important to me than the quality of religious service.

**5. When selecting a retail area in which to shop,**

- A) Ethnic diversity is much less important to me than the presence of new, upscale shops.
- B) Ethnic diversity is somewhat less important to me than the presence of new, upscale shops.
- C) Ethnic diversity is a little less important to me than the presence of new, upscale shops.
- D) Ethnic diversity is a little more important to me than the presence of new, upscale shops.
- E) Ethnic diversity is somewhat more important to me than the presence of new, upscale shops.
- F) Ethnic diversity is much more important to me than the presence of new, upscale shops.

**6. When selection a sports team or organization for my child,**

- A) Ethnic diversity is much less important to me than its past record of wins and losses.
- B) Ethnic diversity is somewhat less important to me than its past record of wins and losses.
- C) Ethnic diversity is a little less important to me than its past record of wins and losses.
- D) Ethnic diversity is a little more important to me than its past record of wins and losses.
- E) Ethnic diversity is somewhat more important to me than its past record of wins and losses..
- F) Ethnic diversity is much more important to me than its past record of wins and losses.

## Appendix J

### Prejudice Theories

1. People have a certain amount of prejudice and they can't really change that.

1	2	3	4	5	6
very	strongly	disagree	agree	strongly	very
strongly	disagree			agree	strongly
disagree					agree

2. People's level of prejudice is something very basic about them that they can't change very much.

1	2	3	4	5	6
very	strongly	disagree	agree	strongly	very
strongly	disagree			agree	strongly
disagree					agree

3. No matter who somebody is, they can always become a lot less prejudiced.

1	2	3	4	5	6
very	strongly	disagree	agree	strongly	very
strongly	disagree			agree	strongly
disagree					agree

4. People can change their level of prejudice a great deal.

1	2	3	4	5	6
very	strongly	disagree	agree	strongly	very
strongly	disagree			agree	strongly
disagree					agree

5. People can learn how to act like they're not prejudice, but they can't really change their prejudice deep down.

1	2	3	4	5	6
very	strongly	disagree	agree	strongly	very
strongly	disagree			agree	strongly
disagree					agree

6. As much as I hate to admit it, you can't teach an old dog new tricks. People can't really change how prejudiced they are.

1	2	3	4	5	6
very	strongly	disagree	agree	strongly	very
strongly	disagree			agree	strongly
disagree					agree

## Appendix K

### Prejudice Concerns

1. I am worried that I might find myself thinking prejudiced thoughts around people of a different ethnicity.

1	2	3	4	5	6
very	strongly	disagree	agree	strongly	very
strongly	disagree			agree	strongly
disagree					agree

2. When I think about talk to someone of a different ethnicity, I am worried I might have inappropriate thoughts or feelings.

1	2	3	4	5	6
very	strongly	disagree	agree	strongly	very
strongly	disagree			agree	strongly
disagree					agree

3. When talking to a person of a different ethnicity, I am worried I might say something that will make me look prejudiced.

1	2	3	4	5	6
very	strongly	disagree	agree	strongly	very
strongly	disagree			agree	strongly
disagree					agree

4. I am concerned that something I do or say when talking to someone with a different ethnicity might be labeled prejudiced.

1	2	3	4	5	6
very	strongly	disagree	agree	strongly	very
strongly	disagree			agree	strongly
disagree					agree

5. When talking to someone of a different ethnicity, I worry they might treat me in a prejudiced way.

1	2	3	4	5	6
very	strongly	disagree	agree	strongly	very
strongly	disagree			agree	strongly
disagree					agree

6. When I see someone of a different ethnicity, I worry that they will act prejudiced towards me.

1	2	3	4	5	6
very	strongly	disagree	agree	strongly	very
strongly	disagree			agree	strongly
disagree					agree



## Appendix L

### Prejudice Concerns about Child

1. I am worried that my child might think prejudiced thoughts around people of different ethnicities.

1	2	3	4	5	6
very strongly disagree	strongly disagree	disagree	agree	strongly agree	very strongly agree

2. When my child thinks about talking to someone of a different ethnicity, I am worried that he/she might have inappropriate thoughts or feelings.

1	2	3	4	5	6
very strongly disagree	strongly disagree	disagree	agree	strongly agree	very strongly agree

3. When my child thinks about talking to someone of a different ethnicity, I am worried that my child might say something that will make him/her look prejudiced.

1	2	3	4	5	6
very strongly disagree	strongly disagree	disagree	agree	strongly agree	very strongly agree

4. I am concerned that something my child does or say when talking to someone with a different ethnicity might be labeled prejudice.

1	2	3	4	5	6
very strongly disagree	strongly disagree	disagree	agree	strongly agree	very strongly agree

5. When my child talks to someone of a different ethnicity, I worry that he/she might be treated in a prejudiced way.

1	2	3	4	5	6
very strongly disagree	strongly disagree	disagree	agree	strongly agree	very strongly agree

6. When I see someone of a different ethnicity, I worry that they will act prejudiced towards my child.

1	2	3	4	5	6
very strongly disagree	strongly disagree	disagree	agree	strongly agree	very strongly agree

## Appendix M

### Colorblind Ideology

1. I think it's best to avoid mentioning someone's race when talking about or describing someone.

1	2	3	4	5	6
very	strongly	disagree	agree	strongly	very
strongly	disagree			agree	strongly
disagree					agree

2. I try to downplay racial difference between racial or ethnic groups.

1	2	3	4	5	6
very	strongly	disagree	agree	strongly	very
strongly	disagree			agree	strongly
disagree					agree

3. I am afraid if I mention race, people will think I am prejudiced.

1	2	3	4	5	6
very	strongly	disagree	agree	strongly	very
strongly	disagree			agree	strongly
disagree					agree

4. I like to think that I don't see race.

1	2	3	4	5	6
very	strongly	disagree	agree	strongly	very
strongly	disagree			agree	strongly
disagree					agree

5. Every person has a "fair shot" at life, no matter their race.

1	2	3	4	5	6
very	strongly	disagree	agree	strongly	very
strongly	disagree			agree	strongly
disagree					agree

6. Racism doesn't exist in our society anymore.

1	2	3	4	5	6
very	strongly	disagree	agree	strongly	very
strongly	disagree			agree	strongly
disagree					agree

## Appendix N

### Fear of Discussing Race

1. I fear that talking about race with my child will draw his or her attention to race unnecessarily.

1	2	3	4	5	6
very	strongly	disagree	agree	strongly	very
strongly	disagree			agree	strongly
disagree					agree

2. I fear that talking about race with my child will lead him or her to be racially biased.

1	2	3	4	5	6
very	strongly	disagree	agree	strongly	very
strongly	disagree			agree	strongly
disagree					agree

3. I don't know what my child understands about race at his age.

1	2	3	4	5	6
very	strongly	disagree	agree	strongly	very
strongly	disagree			agree	strongly
disagree					agree

4. I am nervous about talking about race with my child.

1	2	3	4	5	6
very	strongly	disagree	agree	strongly	very
strongly	disagree			agree	strongly
disagree					agree

5. I don't know what to say about race that will lead my child to be unbiased.

1	2	3	4	5	6
very	strongly	disagree	agree	strongly	very
strongly	disagree			agree	strongly
disagree					agree

## Appendix O

### Mother Scheme

Rate the extent to which the mother appeared to exhibit each of the following items.

1 Not at all	2 Hardly at all	3 A little bit	4 Somewhat	5 Pretty much	6 Quite a lot or very
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1. Friendly/Warm toward the confederate: \_\_\_\_\_
2. At ease/Comfortable in the room: \_\_\_\_\_
3. Tried to initiating 3-way interaction  
(smiling, talking loudly, displaying openness, etc.) \_\_\_\_\_
4. Tried to avoid communication 3-way interaction with confederate  
(e.g., avoid eye contact, distract child, whispering, blocking child, etc.). \_\_\_\_\_
5. How prejudice is the target? \_\_\_\_\_

### Child Scheme

Rate the extent to which the child appeared to exhibit each of the following items.

1 Not at all	2 Hardly at all	3 A little bit	4 Somewhat	5 Pretty much	6 Quite a lot or very
--------------------	-----------------------	----------------------	---------------	---------------------	--------------------------------

1. Friendly/Warm toward the confederate: \_\_\_\_\_
2. At ease/Comfortable in the room: \_\_\_\_\_
3. Tried to initiating 3-way interaction  
(smiling, talking loudly, displaying openness, etc.) \_\_\_\_\_
4. Tried to avoid communication 3-way interaction with confederate  
(e.g., avoid eye contact, distract child, whispering, blocking child, etc.). \_\_\_\_\_
5. How prejudice is the target? \_\_\_\_\_
6. Rate the degree to skin-to-skin contact with mom: \_\_\_\_\_

## References

- About, F. E. (1984). Social and cognitive bases of ethnic identity constancy. *Research and Theory on Human Development, 145*, 217-230.
- About, F.E. (1988). *Children and prejudice*. New York: Blackwell.
- About, F. E. (2003). The formation of in-group favoritism and out-group prejudice in young children: Are they distinct attitudes? *Deveolopmental Psychology, 39*, 48-60.
- About, F. E. (2005). The development of prejudice in childhood and adolescence. In J.F. Dovidio, P. Glick, & L. A. Rudman (Eds.), *On the nature of prejudice: Fifty years after Allport* (pp. 310-326). Malden, MA: Blackwell Publishing.
- About, F.E., & Doyle, A.B. (1996). Parental and peer influences on children's racial attitudes. *International Journal of Intercultural Relations, 20*, 371-383.
- About, F. E., & Fenwick, V. (1999). Exploring and evaluation school-based interventions to reduced prejudice. *Journal of Social Issues, 55*, 767-786.
- About, F. E., & Mitchell, F. G. (1984). Racial role taking: The effects of preference and self-identification. *International Journal of Psychology, 12*, 1-17.
- Allport, G. (1954). *The nature of prejudice*. Reading, MA: Addison-Wesley.
- Anderson, C. A., & Bushman, B. J. (2001). Effects of violent video games on aggressive behavior, aggressive cognition, aggressive affect, physiological arousal, and prosocial behavior: A meta-analytic review of the scientific literature. *Psychological Science, 12*, 353-359
- Bandura, A. (1977). *Social Learning Theory*. Oxford, England: Prentice-Hall.
- Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Englewood Cliffs, NJ: Prentice Hall.

- Baron, A. S., & Banaji, M. R. (2006). The development of implicit attitudes: Evidence of race evaluations from ages 6 and 10 and adulthood. *Psychological Science*, 17, 53-58.
- Bates, J. E. (1980). The concept of difficult temperament. *Merril-Palmer Quarterly*, 26, 299-319.
- Bell, R. Q., & Harper, L. (1977). *Child effects on adults*. Lincoln: Univeristy of Nebraska Press.
- Bigler, R. S. (1995). The role of classification skill in moderating environmental influences on children's gender stereotyping: A study of the functional use of gender in the classroom. *Child Development*, 66, 1072-1087.
- Bigler, R. S., & Liben, L. S. (1992). Cognitive mechanisms in children's gender stereotyping: Theoretical and educational implications of a cognitive-based intervention. *Child Development*, 63, 1351-1363.
- Bigler, R. S., & Liben, L. S. (1993). A cognitive-developmental approach to racial stereotyping and reconstructive memory in Euro-American children. *Child Development*, 64, 1507-1518.
- Bigler, R. S. & Liben, L. S. (2006). A developmental intergroup theory of social stereotypes and prejudice. In R. V. Kail (Ed.), *Advances in child development and behavior* (Vol. 34, pp. 39-89), San Diego: Elsevier.
- Bigler, R. S. & Liben, L. S. (2007). Developmental intergroup theory: Explaining and reducing children's social stereotyping and prejudice. *Current Directions in Psychological Science*, 16, 162-166.
- Bird, C., Monachesi, E. D., & Burdick, H. (1952). Infiltration and the attitudes of white and Negro parents and children. *Journal of Abnormal Social Psychology*, 47, 688-689.

- Bowman, P. J., & Howard, C. (1985). Race-Related socialization, motivation and academic achievement. *Journal of the American Academy of Child Psychiatry*, 24, 134-141.
- Carlson, J. M., & Iovini, J. (1985). The transmission of racial attitudes from fathers to sons: A study of Blacks and Whites. *Adolescence*, 20, 233-237.
- Castelli, L., De Dea, C., & Nesdale, D. (2008). Learning social attitudes: Children's sensitivity to the nonverbal behaviors of adult models during interracial interactions. *Personality and Social Psychology Bulletin*, 34, 1504-1513.
- Coser, R. L. (1964). Authority and structural ambivalence. In R. L. Coser (Ed.), *The family, its structure and functions* (pp. 325-340). New York: St. Martins.
- Dovidio, J. F., & Fazio, R. H. (1992). New technologies for the direct and indirect assessment of attitudes. IN J. Tanur (Ed.), *Questions about survey questions: Meaning, memory, attitudes, and social interaction* (pp. 204-237). New York: Russell Sage Foundation.
- Doyle, A.B., & Aboud, F.E. (1995). A longitudinal study of White children's racial prejudice as a social cognitive development. *Merrill-Palmer Quarterly*, 41, 209-228.
- Farver, J. A. M., Ghosh, C., & Garcia, C. (2000). Children's perceptions of their neighborhoods. *Journal of Applied Developmental Psychology*, 21, 139-163.
- Goodman, M . E . (1946). Evidence concerning the genesis of interracial attitudes. *American Anthropologist*, 48, 624-630.
- Goodman, M. E. (1952). *Race awareness in young children*. Cambridge: Addison-Wesley.
- Horowitz, E. (1936). The development of attitude toward the Negro. *Archives of Psychology*, 194, 5-47

- Hughes, D. (2003). Correlates of African American and Latino parents' messages to children about ethnicity and race: A comparative study of racial socialization. *American Journal of Community Psychology, 31*, 15-33.
- Hughes, J.M., Bigler, R.S., & Levy, S. (2007). Consequences of learning about racism among European American and African American children. *Child Development, 78*, 1689-1705.
- Hughes, D., & Chen, L. (1997). When and what parents tell children about race: An examination of race-related socialization among African American families. *Applied Developmental Science, 1*, 200-214.
- Hughes, D., & Chen, L. (1999). The nature of parents' race-related communications to children: A developmental perspective. In L. Balter & C. S. Tamis-LeMonda (Eds.), *Child psychology: A handbook of contemporary issues* (pp. 467-490). Philadelphia, PA: Psychology Press/Taylor & Francis.
- Hughes, D., & Johnson, D. (2001). Correlates in children's experiences of parents' racial socialization behaviors. *Journal of Marriage and Family, 63*, 981-995.
- Hughes, D., Rodriguez, J., Smith, E.P., Johnson, D.J., Stevenson, H.C., & Spicer, P. (2006). Parents' ethnic-racial socialization practices: A review of research and directions for future study. *Developmental Psychology, 42*, 747-770.
- Hutson, A., & Wright, J. (1998). Television and the informational and educational needs of children. *The Annals of the American Academy of Political and Social Science, 558*, 9-23
- Katz, P. A. (1976). The acquisition of racial attitudes in children. In P. A. Katz (Ed.), *Towards the elimination of racism* (pp. 125-153). New York: Pergamon.
- Katz, P. A., & Downey, E. P. (2002). *Infant categorization of race and gender cues*.



- Unpublished manuscript, Institute of Research on Social Problems, Boulder, CO.
- Katz, P. A., & Hass, R. G. (1998). Racial ambivalence and American value conflict. *Journal of Personality and Social Psychology*, 55, 893-905.
- Knight, G. P., Nernal, M. E., Garza, C. A., Cota, M. K., & Ocampo, K. A. (1993). Family socialization and the ethnic identity of Mexican-American children. *Journal of Cross-Cultural Psychology*, 24, 99-114.
- Kochanska, G., Aksan, N., & Joy, M. E. (2007). Children's fearfulness as a moderator of parenting in early socialization. Two longitudinal studies. *Development Psychology*, 43, 222-237.
- Kofkin, J.A., Katz, P.A., & Downey, E.P. (1995). Family discourse about race and the development of children's racial attitudes. Poster presented at the Society for Research in Child Development meetings, Indianapolis, IN.
- Levin, S., van Laar, C., & Sidanius, J. (2003). The effects of ingroup and outgroup friendship on ethnic attitudes in college: A longitudinal study. *Group Processes & Intergroup Relations*, 6, 76-92.
- Maccoby, E. E., & Martin, J. (1983). Socialization in the context of the family: Parent-child interaction. In P.H. Mussen (Ser. Ed.) & E. M. Hetherington (Vol. Ed.), *Handbook of child psychology: Socialization, personality, and social development*, 4, 1-102.
- Mandara, J. (2006). The impact of family functioning on African American males' academic achievements: A review of clarification of the empirical literature. *Teachers College Record*, 108, 206-223.
- Margie, N. G., Killen, M., Sinno, S., & McGlothlin, H. (2005). Minority children's

- intergroup attitudes about peer relationships. *British Journal of Developmental Psychology*, 23, 251-269.
- Marshall, S. (1995). Ethnic socialization of African American children: Implications for parenting, identity development, and academic achievement. *Journal of Youth and Adolescence*, 24, 377-396.
- McAdoo, H. P. (2002). The village talks: Racial socialization of our children. In H.P. McAdoo (Ed.), *Black children: Social, educational, and parental environments* (pp. 47-55). Thousand Oaks, CA: Sage.
- McConahay, J. B. (1983). Modern racism and modern discrimination: The effects of race, racial attitudes, and context on simulated hiring decisions. *Personality and Social Psychology Bulletin*, 9, 551-558.
- McGlothlin, H. & Killen, M. (2006). Intergroup attitudes of European American children attending ethnically homogenous schools. *Child Development*, 77, 1375-1386.
- McGlothlin, H. & Killen, M. (2010). How social experience is related to children's intergroup attitudes. *European Journal of Social Psychology*, 40, 625-634.
- McHale, S. M., Crouter, A. C., & Whiteman, S. D. (2003). The family contexts of gender development in childhood and adolescence. *Social Development*, 12, 125-148.
- Medrich, E. A., Roizen, J. A., Rubin, Z., & Buckley, S. (1982). *The serious study of children's lives outside of school*. Berkeley: University of California Press.
- Miller, P. H. (2010). *Theories of developmental psychology* (5th edition). New York: Worth Publishers
- Mosher, D. L., & Scodel, A. (1960). Relationships between ethnocentrism in children and

- the ethnocentrism and authoritarian rearing practices of their mothers. *Child Development*, 31, 369-376.
- Murray, C. B., & Mandara, J. (2002). Racial identity development in African American Children: Cognitive and experimental antecedents. In H. P. McAdoo (Ed.), *Black children: Social, educational, and parental environments* (2<sup>nd</sup> ed., pp. 73-96). Thousand Oaks, CA: Sage.
- Murry, V. M., & Brody, G. H. (2002). Racial socialization processes in single-mother families: Linking maternal racial identity, parenting and racial socialization in rural, single-mother families with child self-worth and self-regulation. In H. P. McAdoo (Ed.), *Black children: Social, educational, and parental environments* (2<sup>nd</sup> ed., pp. 97-115). Thousand Oaks, CA: Sage.
- Nesdale, D. (2001). The development of prejudice in children. In: Augoustinos MA, Reynolds KJ, editors. *Understanding Prejudice, Racism, and Social Conflict*. London: Sage; pp. 57-73.
- Page-Gould, E., Mendoza-Denton, R., & Tropp, L. R. (2008). With a little help from my cross-group friend: Reducing anxiety in intergroup contexts through cross-group friendship. *Journal of Personality and Social Psychology*, 95, 1080-1094.
- Pahlke, E., Bigler, R., & Suizzo, M. (2012). Relations between colorblind socialization and children's racial bias: Evidence from European American mothers and their preschool children. *Child Development*, 83, 1164-1179.
- Parke, R. D., & Buriel, R. (1998). Socialization in the family: Ethnic and ecological perspectives. In N. Eisenberg (Ed.), *Handbook of child psychology: Social, emotion, and personality development*, 3 (pp. 463-552). New York: John Wiley & Sons, Inc.

- Parkes, R. D., Burks, V. M., Carson, J. L., Neville, B., & Boyum, L. A. (1994). Family-peer relationship: A tripartite model. R. D. Parke & S. G. Kellman (Eds.), *Exploring family relationships with other social contexts* (pp. 115-146). Hillsdale, NJ: Lawrence Erlbaum Associates.
- Peters, M. F. (1985). Racial socialization of young Black children. In H. P. McAdoo & J. L. McAdoo (Eds.), *Black children: Social, educational, and parental environments* (pp. 159-173). Newbury Park, CA: Sage.
- Pettigrew, T. F. (1986). The contact hypothesis revisited. See Hewstone & Brown 1986, pp 169-95.
- Pettigrew, T. F. (1998). Intergroup Contact Theory. *Annual Review of Psychology*, 49, 65-85.
- Phinney, J. S., & Chavira, V. (1995). Parental ethnic socialization and adolescent coping with problems related to ethnicity. *Journal of Research on Adolescence*, 5, 31-54.
- Piaget, J. (1962). *Play, dreams, and imitation in childhood*. New York: Norton.
- Pushkin, I. (1967). *A study of ethnic choice in the play of young children in three London districts*. Unpublished doctoral thesis, University of London.
- Radke, M. J., & Trager, H. G. (1950). Children's perceptions of the social roles of Negroes and whites. *Journal of Psychology*, 29, 3-33.
- Reitz, E., Dekovic, M., Meijer, A. M., & Engels, R. C. M. E. (2006). Longitudinal relations among parenting, best friends, and early adolescent problem behavior. *The Journal of Early Adolescence*, 26, 272-295.
- Richeson, J. A. & Shelton, J. N. (2007). Negotiating interracial interactions: Costs,

consequences, and possibilities. *Current Directions in Psychological Science*, 16, 316-320.

Rogoff, B. (2003). *The cultural nature of human development*. New York, NY: Oxford University Press.

Rohrbach, J. M. & Bigler, R. S. (in prep). Whites' social networks predict racial attitudes but not behavior.

Rollock, D., & Vrana, S.R. (2005). Ethnic Social Comfort I: Construct validity through social distance measurement. *Journal of Black Psychology*, 31, 386-417.

Rubin, Z., & Sloman, J. (1984). How parents influence their children's friendships. In M. Lewis (Ed.), *Beyond the dyad* (pp. 223-250). New York: Plenum.

Thorton, M. C., Chatters, L. M., Taylor, R. J., & Allen, W. R. (1990). Sociodemographic and environmental correlates of racial socialization by black parents. *Child Development*, 61, 401-409.

Tomasello, M. (1999). The human adaptation for culture. *Annual Review of Anthropology*, 28, 509-529.

Wout, D. A., Murphy, M. C., & Steele, C. M. (2010). When your friends matter: The effect of white students' racial friendship networks on meta-perceptions and perceived identity contingencies. *Journal of Experimental Social Psychology*, 46, 1035-1041.